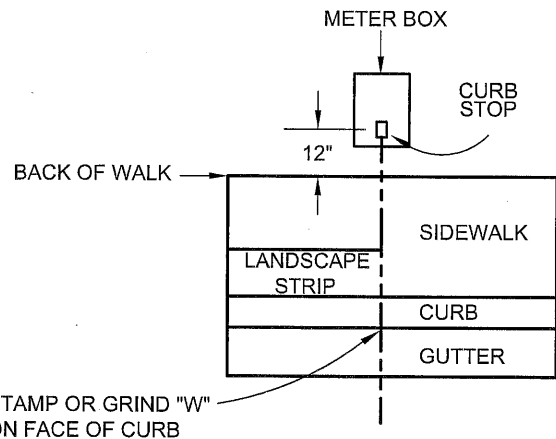


MAIN TYPE	SERVICE CONNECTION TYPE
D.I.P. & C.I.P.	STAINLESS STEEL FULL CIRCLE CLAMP WITH THREADED CORPORATION STOP TO BE USED ON ALL 1" AND 2" SERVICES. 7-1/2" WIDE BAND FOR 1" TAPS 12-1/2" WIDE BAND FOR 2" TAPS
A.C.P.	DOUBLE STRAP SERVICE CLAMP WITH THREADED CORPORATION STOP.
P.V.C.	SERVICE SADDLES FORD S-90 OR AS APPROVED BY ENGINEER.



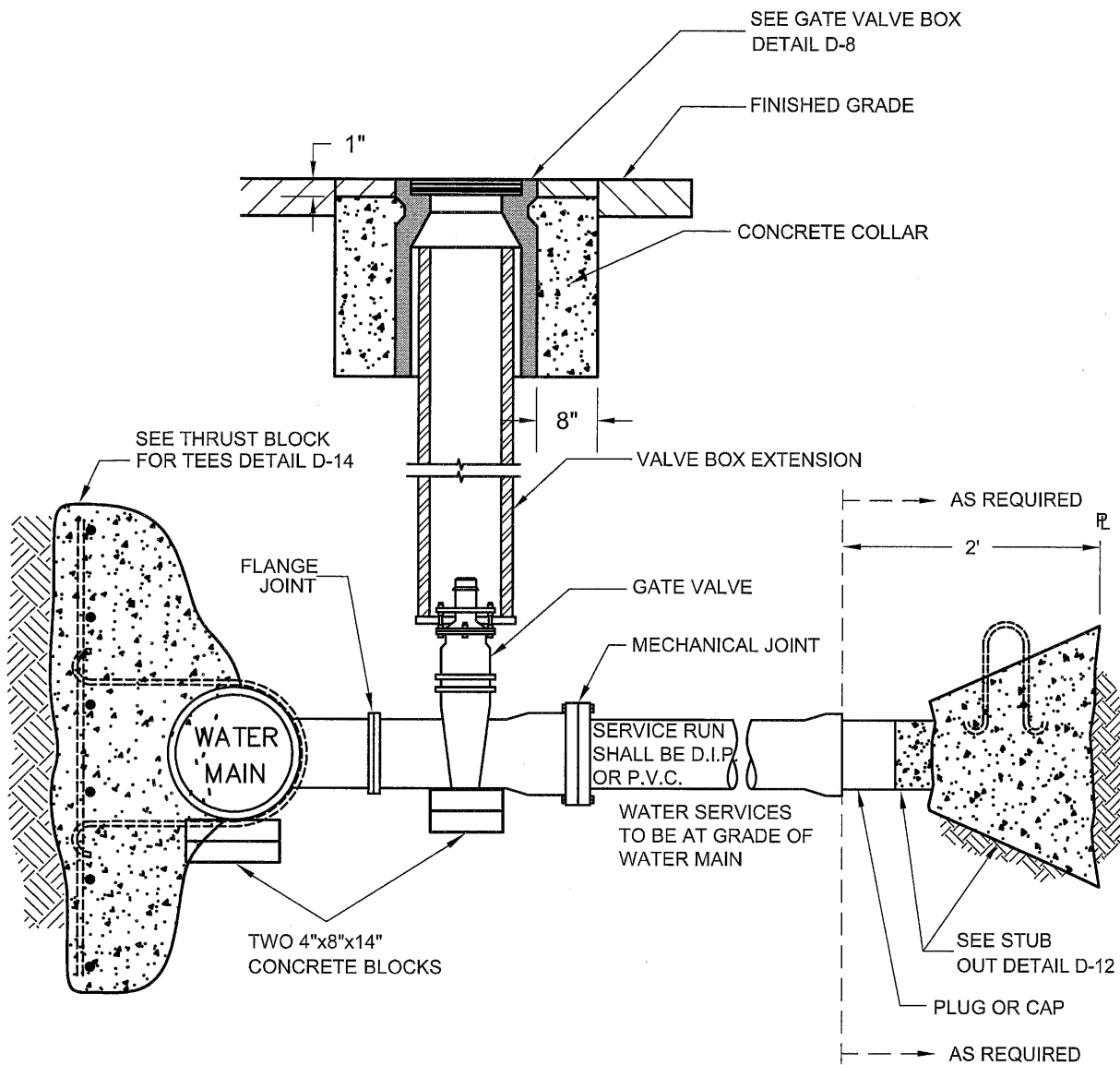
NOTE:


1. INSTALL 1/4" PLYWOOD TO BLOCK PIPE PENETRATIONS INTO METER BOX.
2. CLEAN METER BOX OF DEBRIS. NO EARTH-TO-METER CONTACT.
3. SEE STANDARD DETAIL D-31 FOR CATHODIC PROTECTION REQUIREMENTS, WHEN REQUIRED BY ENGINEER BASED ON LOCATION.

Revision	Date	Approved
Drawn: QT	Date: 10-31-14	
Checked: LA	Scale: NTS	
APPROVED BY: No. 57093 <i>Jacqueline CA Solomon</i> 10/31/14 DATE		
57093 R.C.E. NO.		

CITY OF MOUNTAIN VIEW
PUBLIC WORKS DEPARTMENT
STANDARD DETAIL

1" AND 2" WATER SERVICES
WITH
3/4", 1", 1-1/2", AND 2" WATER METERS

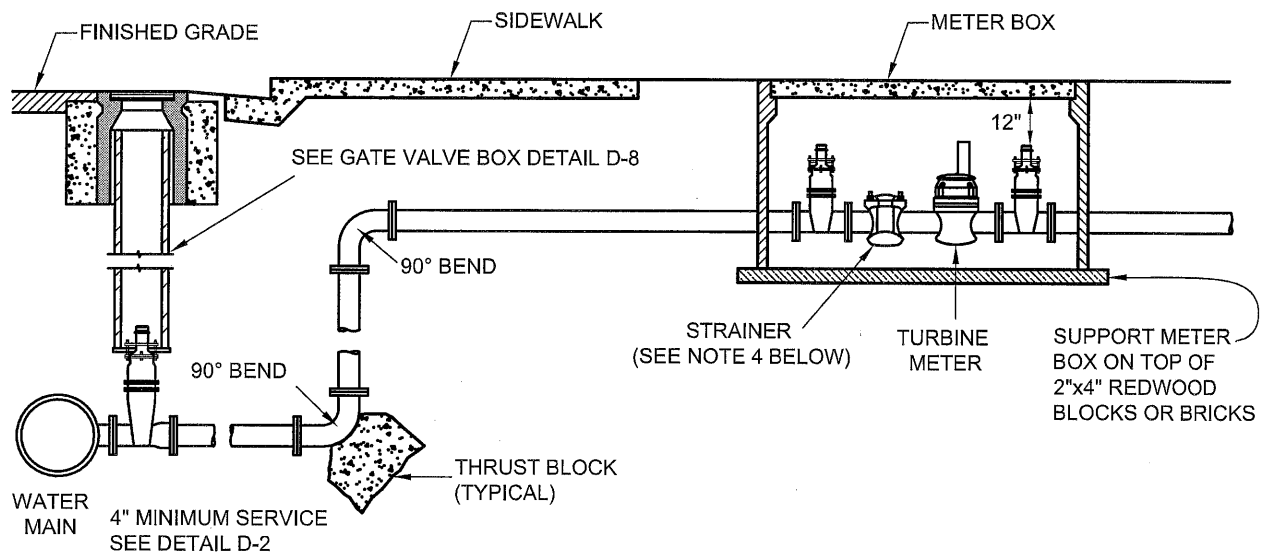
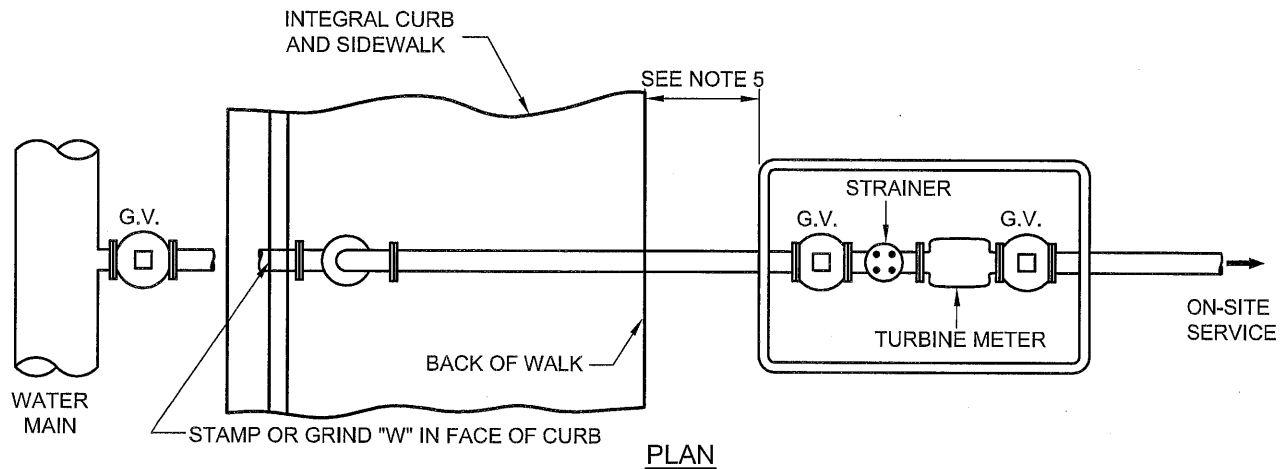


Revision		Date	Approved
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APPROVED BY: No. 57093			
 10/31/14 12-31-15 57093 DATE EXP. R.C.E. NO.			

CITY OF MOUNTAIN VIEW
PUBLIC WORKS DEPARTMENT
STANDARD DETAIL

WATER AND FIRE SERVICE 4" OR LARGER
WITH 3" OR LARGER METERS

FILE NO. D-2



NOTES:

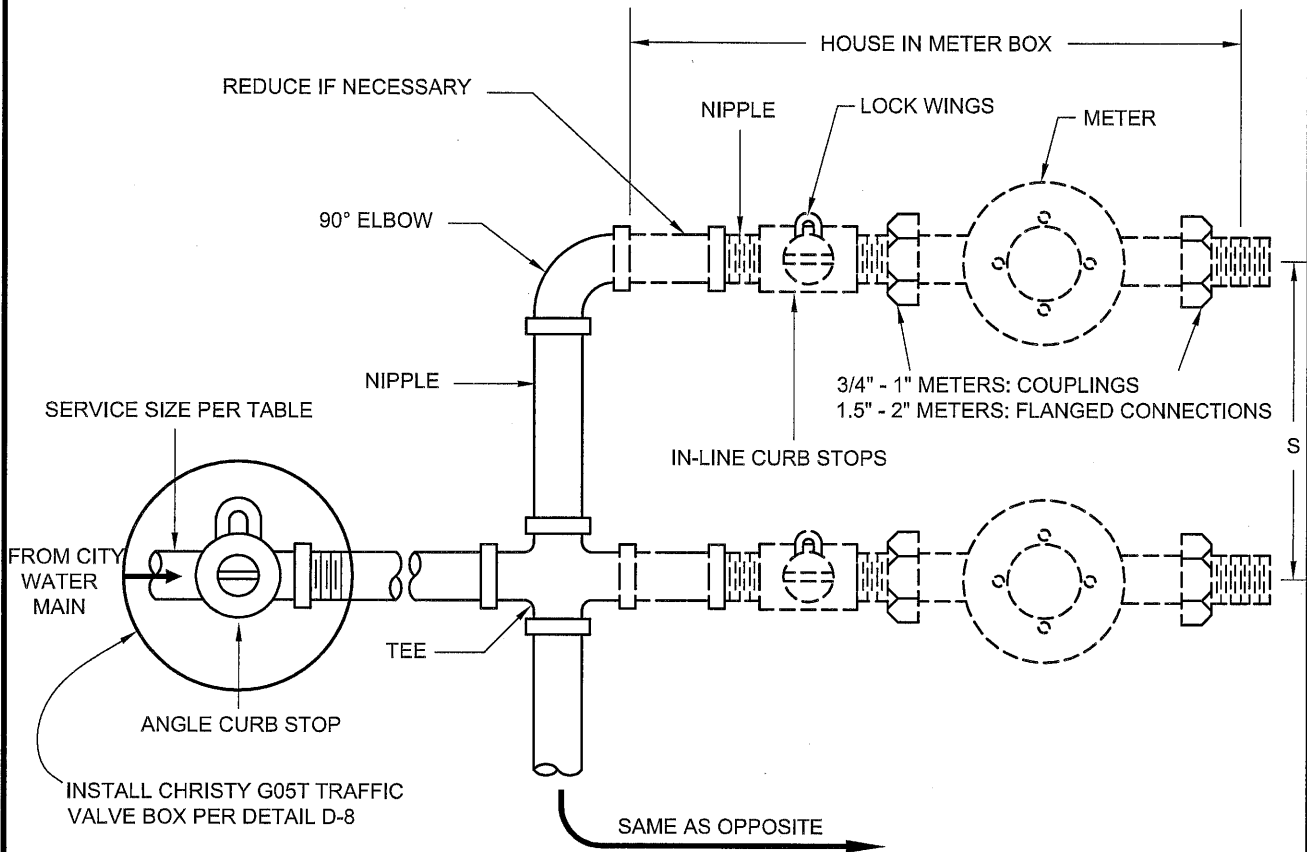
1. THE METER AND METER BOX MAY BE ROTATED 90° TO COMPENSATE FOR SPACE REQUIREMENTS.
2. ALL JOINTS SHALL BE FLANGED TYPE, OR MECHANICAL TYPE JOINTS WITH RETAINER GLANDS. COAT BOLTS, NUTS AND RETAINER GLANDS WITH MASTIC COATING SOLUTION.
3. WRAP ALL METER PIPE, FITTINGS AND VALVES WITH 8 MIL POLYETHYLENE, EXCEPT FOR PIPING IN METER BOX.
4. INSTALL STRAINER UPSTREAM OF METER.
5. LOCATION OF METER + BACKFLOW TO BE DETERMINED BY CITY ENGINEER.
6. INSTALL 1/4" PLYWOOD TO BLOCK PIPE PENETRATIONS INTO METER BOX.
7. CLEAN METER BOX OF DEBRIS. NO EARTH TO METER CONTACT.
8. SEE STANDARD DETAIL D-31A FOR CATHODIC PROTECTION REQUIREMENTS, WHEN REQUIRED BY ENGINEER BASED ON LOCATION.

Revision		Date	Approved
Drawn: QT	Date: 10-31-14		
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APPROVED BY: <i>Jacqueline C. Solomon</i> No. 57093 10/31/14 DATE EXP. 57093 R.C.E. NO.			

CITY OF MOUNTAIN VIEW
PUBLIC WORKS DEPARTMENT
STANDARD DETAIL

3" OR LARGER WATER METER
TURBINE TYPE

FILE NO. D-3



SERVICE SIZE	METER SIZE	SPACING "S"
1"	3/4"	24"
1"	1"	24"
2"	1 1/2"	28"
2"	2"	30"

SINGLE SERVICE CONNECTING TWO METERS
(ADDITIONAL SERVICES MAYBE APPROVED BY CITY ENGINEER)

NOTES:

1. ALL MANIFOLD NIPPLES, FITTINGS, AND PIPE MATERIALS SHALL BE BRASS WITH I.P. THREADS.
2. USE SEPARATE BOX FOR EACH METER. INSTALL SERVICE PER DETAIL D-1
3. FINAL PIPE CONFIGURATION TO BE DETERMINED BY CITY ENGINEER.
4. ALL REDUCTIONS SHALL OCCUR AFTER CURB STOPS, UNLESS CURB STOPS AND METERS ARE 1" OR SMALLER.

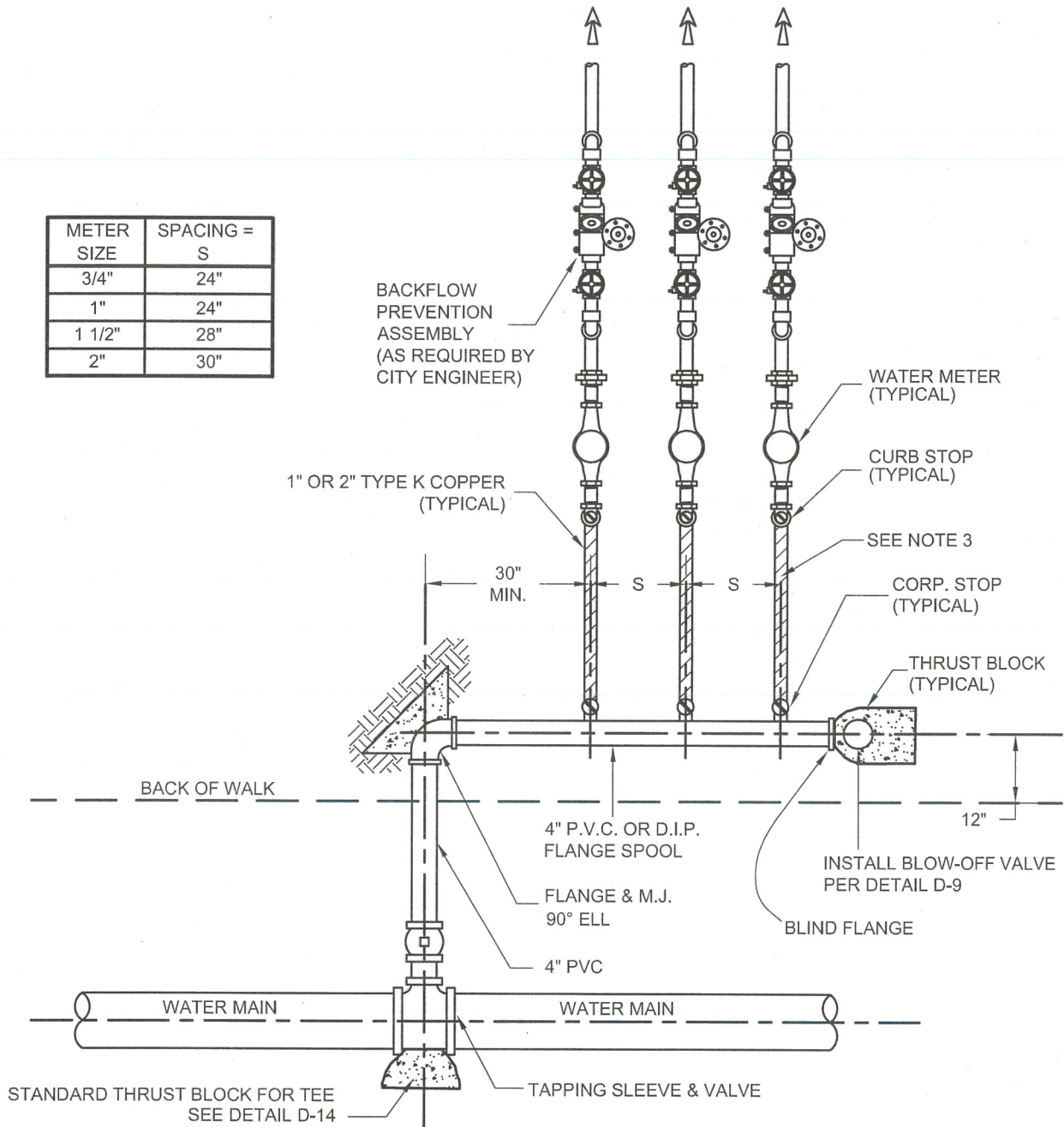
Revision		Date	Approved
Drawn: QT	Date: 10-31-14		
Checked: LA	Scale: NTS		
APPROVED BY: <i>Jacqueline C. Solomon</i> No. 57093 10/31/14 DATE EXP. 57093 R.C.E. NO.			

CITY OF MOUNTAIN VIEW
PUBLIC WORKS DEPARTMENT
STANDARD DETAIL

MANIFOLD WATER SERVICE
3/4", 1", 1-1/2", OR 2" WATER METERS

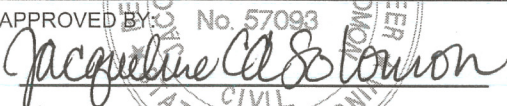
FILE NO. D-3A

METER SIZE	SPACING = S
3/4"	24"
1"	24"
1 1/2"	28"
2"	30"



NOTES:

1. USE OF THIS DETAIL AND FINAL PIPE CONFIGURATION REQUIRE APPROVAL OF CITY ENGINEER.
2. WHEN IRRIGATION SERVICE IS USED, IT SHALL BE LAST SERVICE.
3. PRIME & TAPE PIPE WITH 15 MIL POLYETHYLENE TAPE - 1/2 LAPPED (TYPICAL).
4. STAMP OR GRIND "W" AT FACE OF CURB.
5. SEE DETAIL D-1 FOR WATER SERVICE INSTALLATION DETAILS.

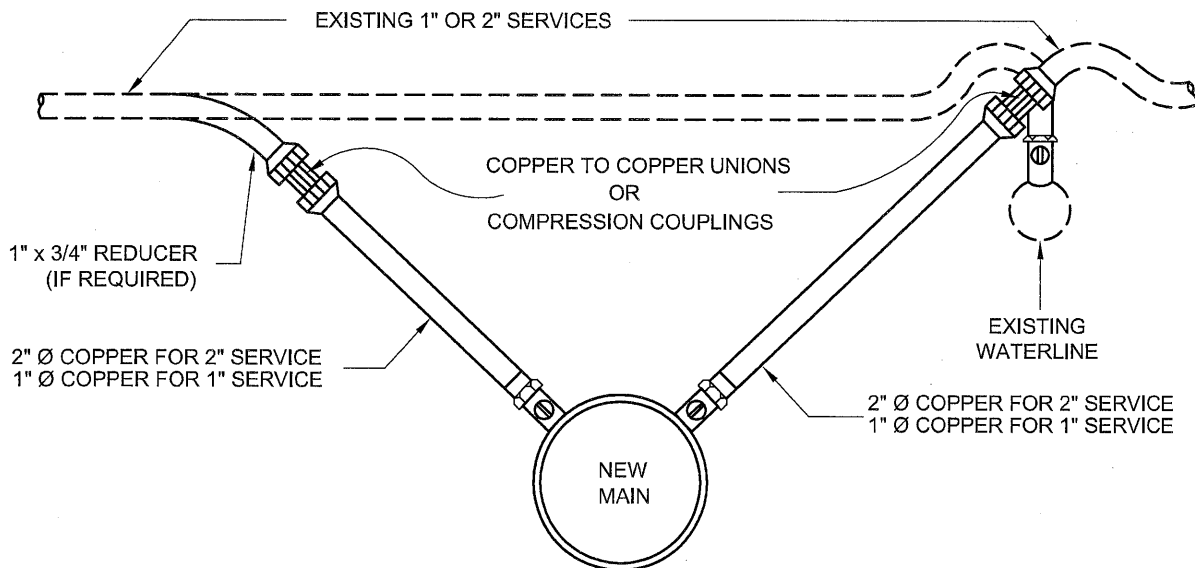
Revision		Date	Approved
Drawn: QT		Date: 01-13-15	
Checked: LA		Scale: NTS	
APPROVED BY: No. 57093			
			
DATE		EXP.	R.C.E. NO.
1/13/2015		12-31-15	57093

CITY OF MOUNTAIN VIEW
PUBLIC WORKS DEPARTMENT
STANDARD DETAIL

MULTIPLE WATER METER INSTALLATION

4" SERVICE AND MANIFOLD

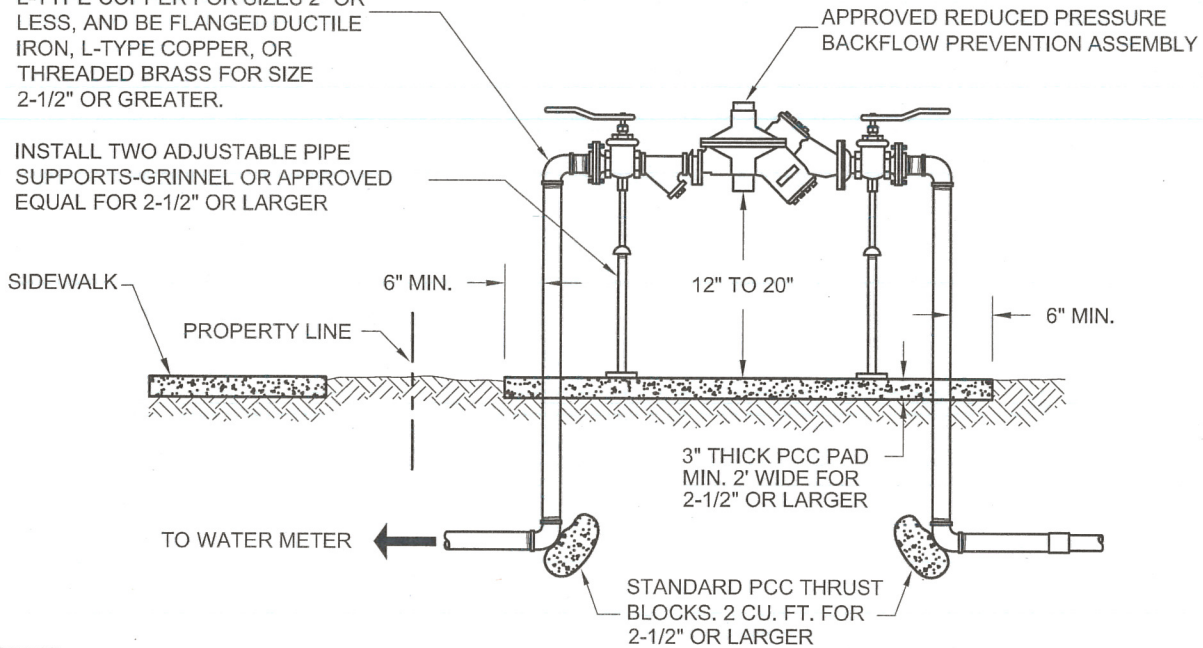
FILE NO. D-3B



Revision Drawn: QT Checked: LA		Date Date: 10-31-14 Scale: NTS	Approved Approved: <i>Jacqueline A. Andrews</i> No. 57093 10/31/14 DATE 92-33-15 EXP.	CITY OF MOUNTAIN VIEW PUBLIC WORKS DEPARTMENT STANDARD DETAIL TRANSFER SERVICE (USED WHEN REPLACING MAIN AND NOT SERVICES)
57093 R.C.E. NO.				FILE NO. D-4


PIPING, VALVES, NIPPLES, ETC. SHALL BE THREADED BRASS OR L-TYPE COPPER FOR SIZES 2" OR LESS, AND BE FLANGED DUCTILE IRON, L-TYPE COPPER, OR THREADED BRASS FOR SIZE 2-1/2" OR GREATER.

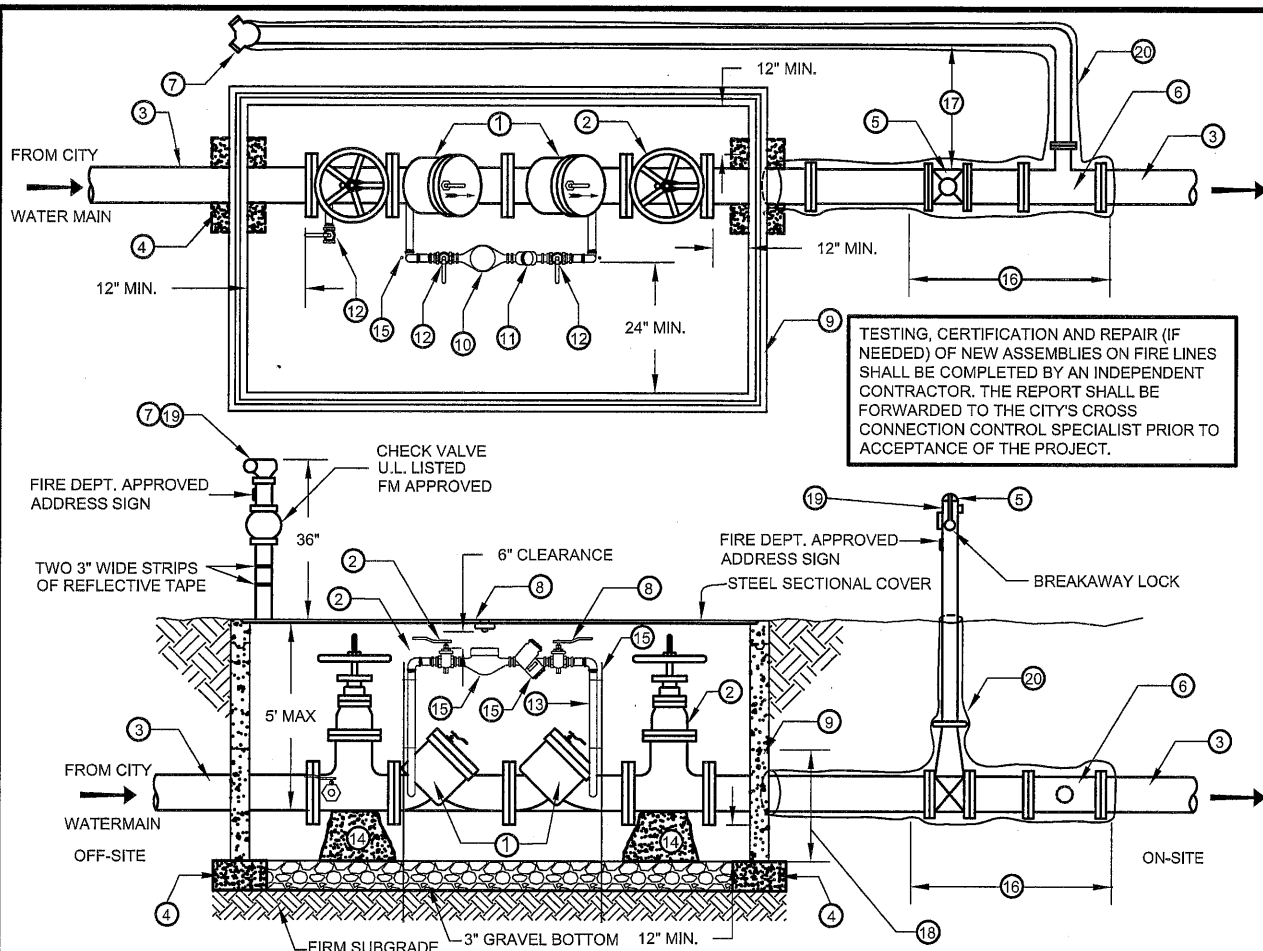
INSTALL TWO ADJUSTABLE PIPE SUPPORTS-GRINNEL OR APPROVED EQUAL FOR 2-1/2" OR LARGER



NOTES:

1. REDUCED PRESSURE BACKFLOW PREVENTION ASSEMBLIES SHALL BE REQUIRED FOR ANY USE WHERE TOXIC MATERIALS ARE USED OR WHERE POSITIVE PROTECTION FOR THE PUBLIC WATER SUPPLY IS REQUIRED. TYPICAL APPLICATIONS INCLUDE: HOSPITALS, MEDICAL AND DENTAL LABORATORIES, MORTUARIES, INDUSTRIAL PLANTS, DRY CLEANERS, LANDSCAPE IRRIGATION, OR AS DETERMINED BY THE CITY.
2. APPROVED REDUCED PRESSURE BACKFLOW PREVENTION ASSEMBLIES SHALL BE LISTED IN THE LATEST EDITION OF THE CITY STANDARD PROVISIONS.
3. BACKFLOW PREVENTION ASSEMBLIES SHALL BE INSTALLED ADJACENT TO AND ON PROPERTY SIDE OF SIDEWALK WHERE APPLICABLE. THE ASSEMBLY SHALL BE INSTALLED AS CLOSE AS POSSIBLE TO THE WATER METER.
4. ALL ASSEMBLIES 3/4" TO 2" WILL HAVE FULL PORT DOMESTIC BALL VALVES, WITH THREADED ENDS. 3" AND LARGER ASSEMBLIES WILL HAVE RESILIENT SEATED GATE VALVES, WITH FLANGED ENDS.
5. PRESSURE DIFFERENTIAL VALVE IS TO BE AT LEAST 12" ABOVE GRADE TO A MAXIMUM OF 20".
6. NO CONNECTION BETWEEN THE BACKFLOW PREVENTION ASSEMBLY AND WATER METER WILL BE PERMITTED. BACKFLOW PREVENTION ASSEMBLIES SMALLER THAN 2.5" SHALL BE PLACED DIRECTLY BEHIND THE WATER METERS, UNLESS THERE IS A CONFLICT WITH OTHER UTILITIES, DRIVEWAYS OR SIDEWALKS. BACKFLOW PREVENTION ASSEMBLIES 2.5" OR LARGER SHALL BE PLACED AS CLOSE TO THE METER AS POSSIBLE, UNLESS AN EXEMPTION IS GRANTED BY THE PUBLIC SERVICES DEPARTMENT. IF AN EXEMPTION IS GRANTED, THE BACK FLOW PREVENTION ASSEMBLY SHALL BE SCREENED WITH LANDSCAPING AND THE TRENCHES SHALL BE LEFT OPEN SO THAT THE CITY CAN VERIFY THAT THERE ARE NO CONNECTIONS BETWEEN THE BACKFLOW PREVENTION ASSEMBLY AND THE METER. THE CITY RESERVES THE RIGHT TO TEST THE SYSTEM TO ENSURE THAT THESE REQUIREMENTS ARE MET.
7. WHERE A BACKFLOW PREVENTION ASSEMBLY IS INSTALLED MORE THAN 8' BEHIND THE WATER OR IRRIGATION METER, THE PIPING BETWEEN THE BACKFLOW PREVENTION ASSEMBLY AND THE METER SHALL BE ENCASED IN CONTROLLED DENSITY FILL (CDF).

				CITY OF MOUNTAIN VIEW PUBLIC WORKS DEPARTMENT STANDARD DETAIL	
Revision	Date	Approved			
Drawn: QT	Date: 01-13-15				
Checked: LA	Scale: NTS			REDUCED PRESSURE BACKFLOW PREVENTION ASSEMBLY	
APPROVED BY: No. 57093					
 1/13/2015 12-31-15 57093 DATE EXP. R.C.E. NO.					
				FILE NO. D-05	



- ① DOUBLE CHECK DETECTOR ASSEMBLY (DCDA) PER CITY APPROVED MATERIAL LIST, OR CITY APPROVED EQUAL. APPROVED ASSEMBLY SHALL BE PURCHASED AND INSTALLED AS A WHOLE UNIT WITH GATE VALVES, BY-PASS METER, BY-PASS BACKFLOW PREVENTER, AND BALL VALVES. METER SHALL READ IN CUBIC FEET.
- ② OUTSIDE SCREW & YOKE (OS & Y) GATE VALVES SHALL BE ELECTRONICALLY MONITORED BY FIRE SPRINKLER MONITORING SYSTEM. CHAIN AND LOCK PER FIRE DEPT. STANDARD.
- ③ PVC CLASS 150 (MIN.) C-900 OR DIP FOR ON-SITE; PVC CLASS 200 (MIN.) C-900 OR DIP FOR OFF-SITE.
- ④ BASE SUPPORT: BRICK, CONCRETE OR BASE ROCK COMPACTED TO 95%.
- ⑤ POST INDICATOR VALVE (PIV) - U.L. LISTED.
- ⑥ TEE FOR FIRE DEPARTMENT CONNECTION.
- ⑦ FIRE DEPARTMENT CONNECTION (FDC), (2-2 1/2" INLETS WITH CLAPPER). FINISHED LOCATION 5' MAX. BEHIND RIGHT-OF-WAY, 3' ABOVE FINISH GRADE.
- ⑧ METER "READ HOLE COVER", 7" x 14" - CENTERED OVER METER.
- ⑨ PRE-CAST CONCRETE SECTIONAL VAULT MAINTAIN MINIMUM CLEARANCES.
- ⑩ WATER METER AS PROVIDED BY ASSEMBLY MANUFACTURER - SHALL READ IN CUBIC FEET.
- ⑪ DOUBLE CHECK VALVE AS PROVIDED BY ASSEMBLY MANUFACTURER.
- ⑫ RESILIENT SEAT BALL VALVE AS PROVIDED BY ASSEMBLY MANUFACTURER.
- ⑬ 3/4" RED BRASS THREADED NIPPLES (LENGTH VARIES).
- ⑭ POUR IN PLACE CONCRETE SUPPORT.
- ⑮ 3/4" REBAR SUPPORT, 24" INTO GROUND.
- ⑯ FIRE PIT SHALL BE INSTALLED ON THE ADDRESS SIDE OF THE BUILDING UNLESS OTHERWISE APPROVED BY FIRE DEPT. AND PUBLIC WORKS DEPT.
- ⑰ MINIMUM 18" CLEARANCE BETWEEN PIV AND FDC.
- ⑱ NOTCHED OPENING EACH END OF VAULT CENTERED 21" FROM INSIDE (SIZE VARIES). TOP OF OPENING TO BE CURVED.
- ⑲ ALL WEATHER EXPOSED SURFACES OF THE FDC AND PIV TO BE PAINTED RED (TYP.). MAINTAIN MIN - 3' CLEARANCE AROUND PIV AND FDC.
- ⑳ ALL FERROUS BURIED PIPES TO BE WRAPPED WITH 8-MIL POLYETHYLENE AND SECURED WITH 10-MIL POLY TAPE. ALL NUTS & BOLTS SHALL BE STAINLESS STEEL AND MASTIC COATED.

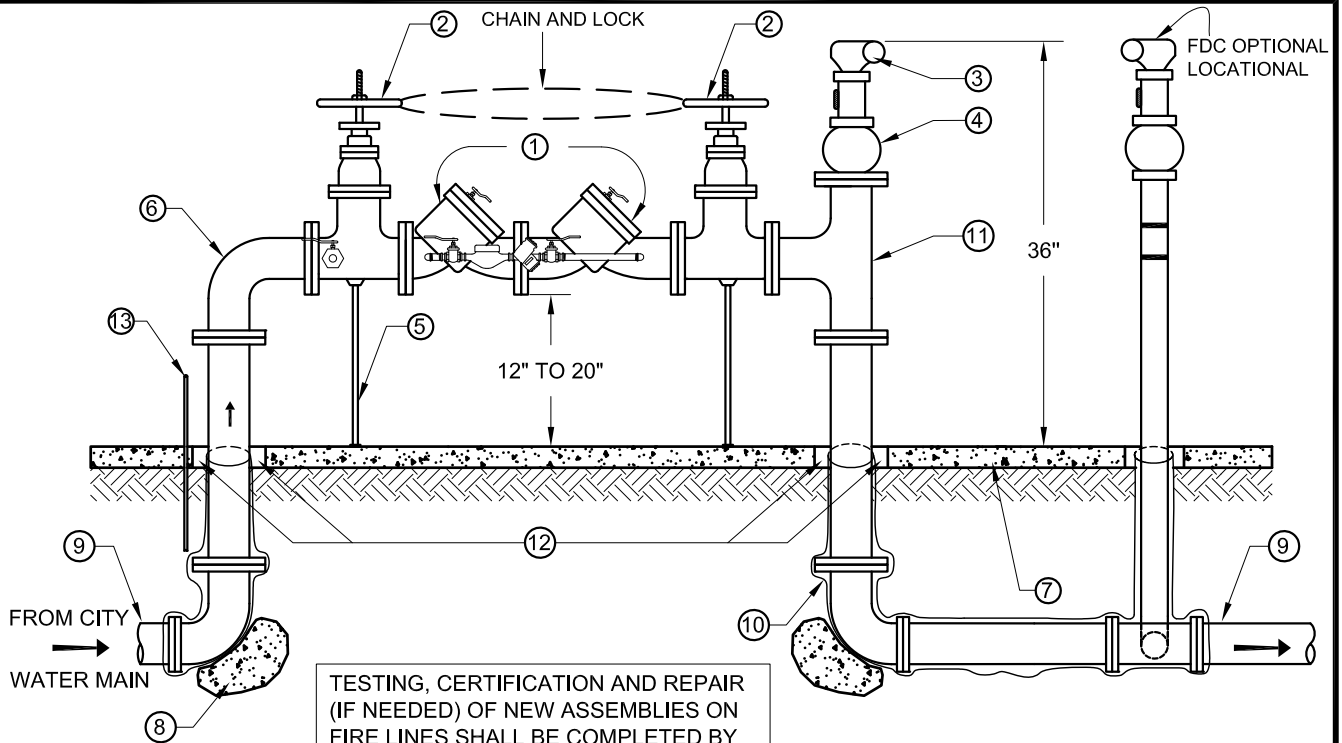
Revision		Date	Approved
Drawn: QT	Date: 10-31-14		
Checked: LA	Scale: NTS		
APPROVED BY: <i>Jacqueline C. Solomon</i> No. 57093 10/31/14 DATE 57093 R.C.E. NO.			

CITY OF MOUNTAIN VIEW
PUBLIC WORKS DEPARTMENT
STANDARD DETAIL

DOUBLE CHECK DETECTOR ASSEMBLY
(BELOW GRADE)

THIS DETAIL IS NOT FOR NEW CONSTRUCTION

FILE NO. D-5A



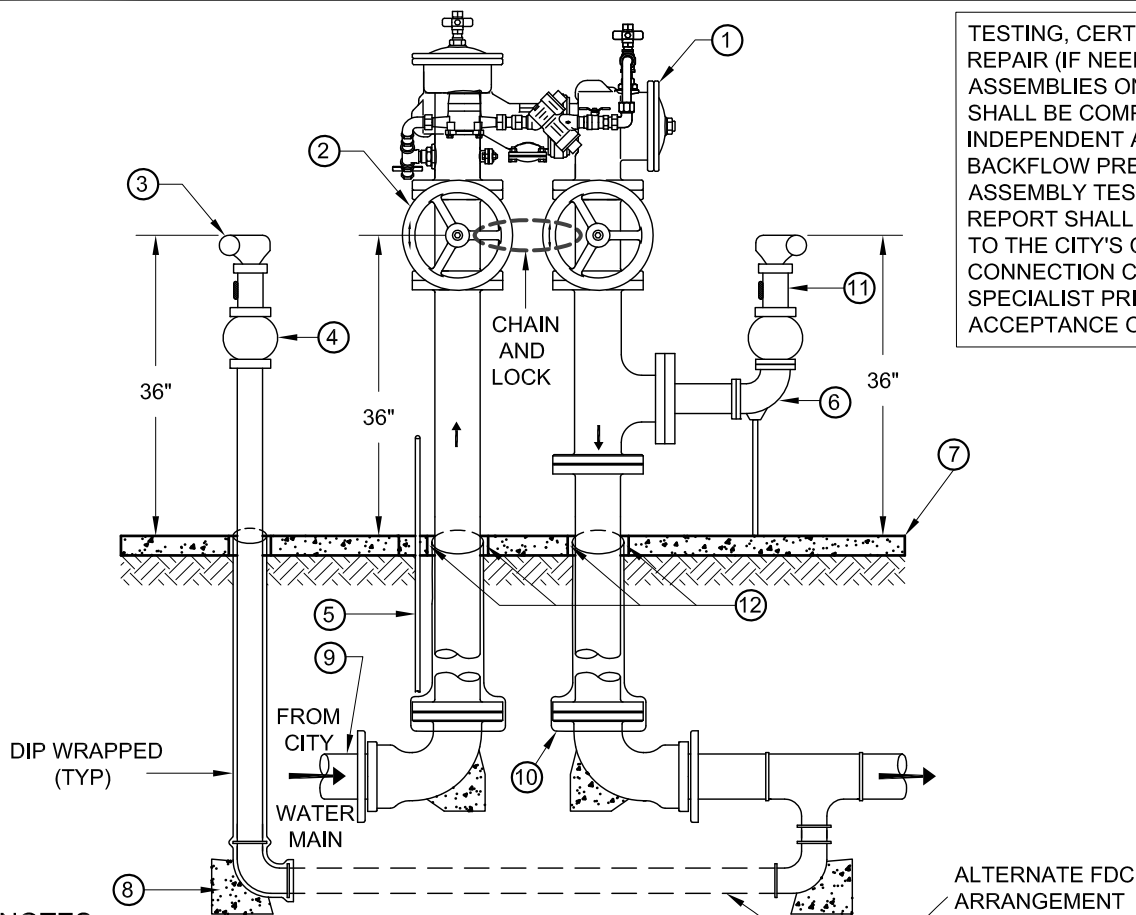
TESTING, CERTIFICATION AND REPAIR (IF NEEDED) OF NEW ASSEMBLIES ON FIRE LINES SHALL BE COMPLETED BY AN INDEPENDENT CONTRACTOR. THE REPORT SHALL BE FORWARDED TO THE CITY'S CROSS CONNECTION CONTROL SPECIALIST PRIOR TO ACCEPTANCE OF THE PROJECT.

NOTES:

- ① DETECTOR, PIPE SIZE, AND FDC LOCATION TO BE APPROVED BY FIRE DEPARTMENT. DOUBLE CHECK DETECTOR ASSEMBLY (DCDA) SHALL BE PURCHASED AND INSTALLED AS A WHOLE UNIT WITH GATE VALVES, BY-PASS METER, BY-PASS BACKFLOW PREVENTOR, AND BALL VALVES. METER SHALL READ IN CUBIC FEET.
- ② OUTSIDE SCREW & YOKE (OS & Y) GATE VALVES SHALL BE ELECTRONICALLY MONITORED BY FIRE SPRINKLER MONITORING SYSTEM. CHAIN AND LOCK PER FIRE DEPT. STANDARD.
- ③ FIRE DEPARTMENT CONNECTION (FDC) (2-2 1/2" INLETS WITH CLAPPERS) SHALL FACE STREET FRONTAGE. FINISHED LOCATION 5' MAX BEHIND R/W. 3' MIN CLEARANCE AROUND BACKFLOW AND FDC. ALL WEATHER EXPOSED SURFACES OF THE FDC TO BE PAINTED RED.
- ④ WAFER CHECK VALVE - U.L. LISTED, FM APPROVED.
- ⑤ INSTALL TWO ADJUSTABLE PIPE SUPPORTS (GRINNELL OR APPROVED EQUAL) UNDER GATE VALVE.
- ⑥ EXPOSED PIPING AND FITTINGS SHALL BE FLANGED DUCTILE IRON.
- ⑦ 4" THICK P.C.C. PAD - EXTEND PAD MINIMUM 2' BEYOND ASSEMBLY (ALL AROUND).
- ⑧ STANDARD P.C.C. THRUST BLOCKS - 2 CU FT FOR 3" & 4" DIA. PIPE.
- ⑨ PVC CLASS 150 (MIN.) C 900 OR DIP FOR ON-SITE; PVC CLASS 200 (MIN.) C 900 OR DIP FOR OFF-SITE.
- ⑩ ALL FERROUS BURIED PIPES TO BE WRAPPED WITH 8-MIL POLYETHYLENE AND SECURE WITH 10-MIL POLY TAPE. ALL NUTS AND BOLTS SHALL BE STAINLESS STEEL AND MASTIC COATED.
- ⑪ MOUNT APPROVED STREET SIGN ON FDC ASSEMBLY FACING STREET FRONTAGE WITH STAINLESS STEEL STRAPS AND SCREWS.
- ⑫ 2" ANNULAR SPACE BETWEEN PIPE AND CONCRETE. FILL IN 2" SPACE WITH SAND.
- ⑬ 1" PVC CONDUIT FOR TAMPER SWITCH - ELEC. TO BLDG. ASR.

		CITY OF MOUNTAIN VIEW PUBLIC WORKS DEPARTMENT STANDARD DETAIL	
Revision	Date	Approved	
Drawn: QT	Date: 07-01-14		
Checked: LA	Scale: NTS		
APPROVED BY: <i>Jacqueline CA Solomon</i>		FIRE DOUBLE CHECK DETECTOR ASSEMBLY (ABOVE GRADE)	
07-03-14 DATE	12-31-15 EXP.	57093 R.C.E. NO.	FILE NO. D-5B

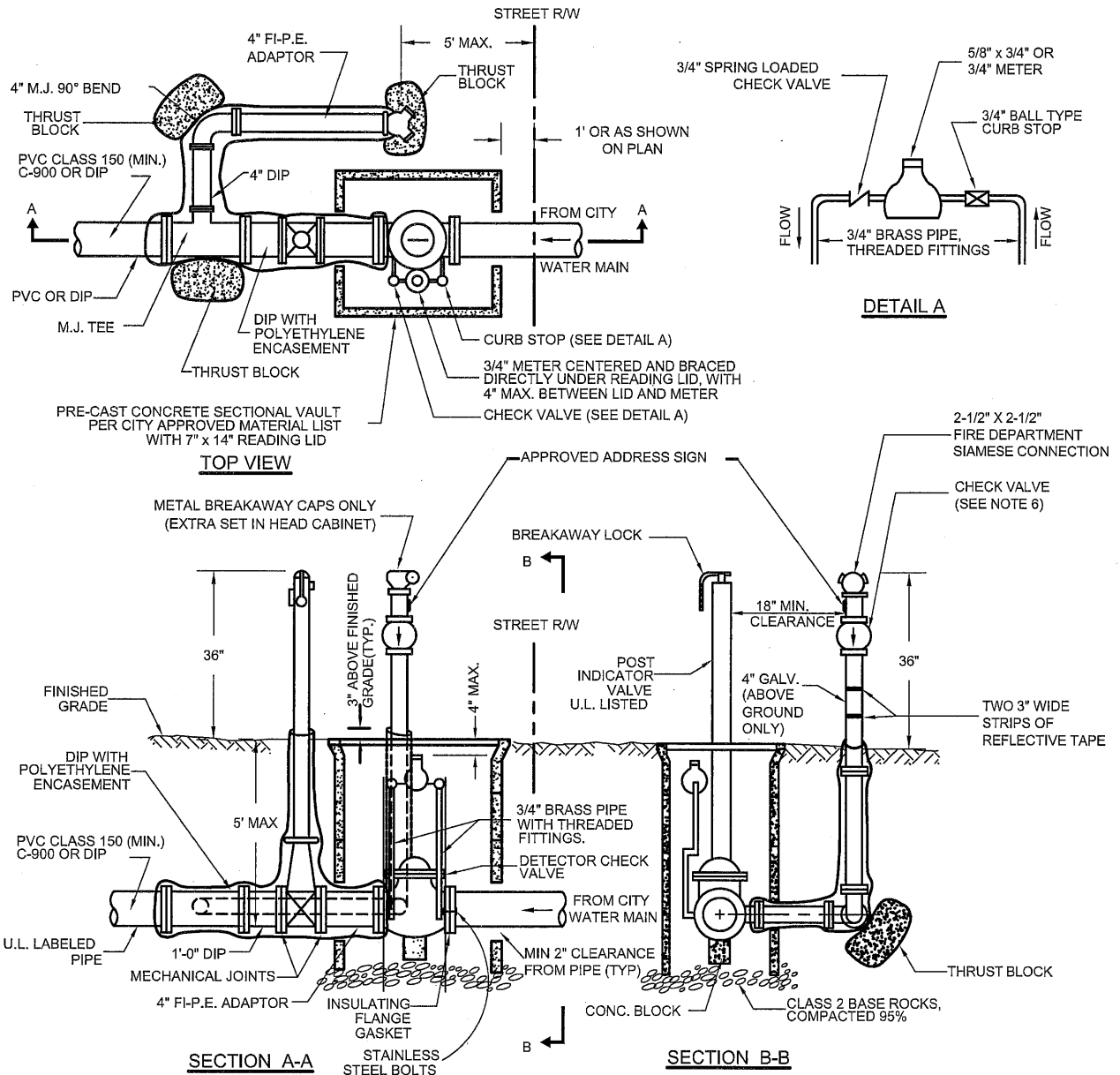
TESTING, CERTIFICATION AND REPAIR (IF NEEDED) OF NEW ASSEMBLIES ON FIRE LINES SHALL BE COMPLETED BY AN INDEPENDENT AWWA CERTIFIED BACKFLOW PREVENTION ASSEMBLY TESTER. THE REPORT SHALL BE FORWARDED TO THE CITY'S CROSS CONNECTION CONTROL SPECIALIST PRIOR TO ACCEPTANCE OF THE PROJECT.



NOTES:

- ① DETECTOR, PIPE SIZE, AND FDC LOCATION TO BE APPROVED BY FIRE DEPARTMENT. DOUBLE CHECK DETECTOR ASSEMBLY (DCDA) SHALL BE PURCHASED AND INSTALLED AS A WHOLE UNIT WITH GATE VALVES, BY-PASS METER, BY-PASS BACKFLOW PREVENTOR, AND BALL VALVES. METER SHALL READ IN CUBIC FEET.
- ② OUTSIDE SCREW & YOKE (OS & Y) GATE VALVES SHALL BE ELECTRONICALLY MONITORED BY FIRE SPRINKLER MONITORING SYSTEM. CHAIN AND LOCK PER FIRE DEPT. STANDARD.
- ③ FIRE DEPARTMENT CONNECTION (FDC) (2-2 1/2" INLETS WITH CLAPPERS) SHALL FACE STREET FRONTAGE. FINISHED LOCATION 5' MAX BEHIND R/W. 3' MIN CLEARANCE AROUND BACKFLOW AND FDC. ALL WEATHER EXPOSED SURFACES OF THE FDC TO BE PAINTED RED.
- ④ WAFER CHECK VALVE - U.L. LISTED, FM APPROVED.
- ⑤ 1" PVC CONDUIT FOR TAMPER SWITCH - ELEC. TO BLDG. ASR.
- ⑥ EXPOSED PIPING AND FITTINGS SHALL BE FLANGED DUCTILE IRON. INSTALL PIPE SUPPORT AS NEEDED.
- ⑦ 4" THICK P.C.C. PAD - EXTEND PAD MINIMUM 2' BEYOND ASSEMBLY (ALL AROUND).
- ⑧ STANDARD P.C.C. THRUST BLOCKS - 2 CU FT FOR 3" & 4" DIA. PIPE.
- ⑨ PVC CLASS 150 (MIN.) C 900 OR DIP FOR ON-SITE; PVC CLASS 200 (MIN.) C 900 OR DIP FOR OFF-SITE.
- ⑩ ALL FERROUS BURIED PIPES TO BE WRAPPED WITH 8-MIL POLYETHYLENE AND SECURE WITH 10-MIL POLY TAPE. ALL NUTS AND BOLTS SHALL BE STAINLESS STEEL AND MASTIC COATED.
- ⑪ MOUNT APPROVED STREET SIGN ON FDC ASSEMBLY FACING STREET FRONTAGE WITH STAINLESS STEEL STRAPS AND SCREWS.
- ⑫ 2" ANNULAR SPACE BETWEEN PIPE AND CONCRETE. FILL IN 2" SPACE WITH SAND.

		CITY OF MOUNTAIN VIEW PUBLIC WORKS DEPARTMENT STANDARD DETAIL	
Revision	Date	Approved	
Drawn: QT	Date: 07-01-14		
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APPROVED BY: <i>Jacqueline CA Solomon</i>		FIRE DOUBLE CHECK DETECTOR ASSEMBLY (ABOVE GRADE - COMPACT)	
07-03-14 DATE	12-31-15 EXP.	57093 R.C.E. NO.	FILE NO. D-5C



NOTES:

1. METER TO BE 5/8" x 3/4" OR 3/4", ALL BRONZE, STRAIGHT READER IN CUBIC FEET.
2. ALL WEATHER EXPOSED SURFACES OF THE FDC AND PIV TO BE PAINTED RED. MAINTAIN MIN MIN - 3' CLEARANCE AROUND PIV AND FDC.
3. ALL PROVISIONS FOR THRUST AND ANCHORAGE TO BE INCLUDED.
4. ALL FERROUS BURIED PIPES TO BE WRAPPED WITH 8-MIL POLYETHYLENE AND SECURED WITH 10-MIL POLY TAPE. ALL NUTS AND BOLTS SHALL BE STAINLESS STEEL AND MASTIC COATED.
5. SECURE DETECTOR METER AND PIPING TO 3/4" REBAR SUPPORTS, 24" INTO GROUND.
6. ABOVE GROUND CHECK VALVE SHALL BE U.L. LISTED, FM APPROVED.
7. FIRE PIT SHALL BE INSTALLED ON THE ADDRESS SIDE OF THE BUILDING UNLESS OTHERWISE APPROVED BY FIRE DEPARTMENT AND PUBLIC WORKS DEPARTMENT.

Revision		Date	Approved
Drawn: QT	Date: 10-31-14		
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APPROVED BY: <i>Jacqueline Casolomon</i> No. 57093 10/31/14 DATE 10-31-15 EXP. 57093 R.C.E. NO.			

CITY OF MOUNTAIN VIEW
PUBLIC WORKS DEPARTMENT
STANDARD DETAIL

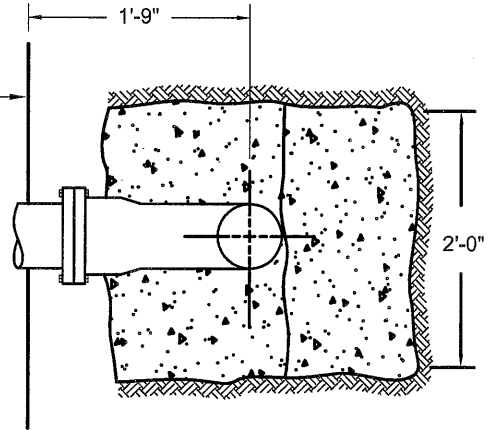
DETECTOR CHECK VALVE
(BELOW GRADE)

THIS DETAIL IS NOT FOR NEW CONSTRUCTION

FILE NO. D-6

FACE OF CURB FOR 6'+ SIDEWALK
BACK OF CURB FOR 5' SIDEWALK
(UNLESS OTHERWISE SHOWN
ON THE PLAN)

FLANGE, BOLTS & NUTS SHALL
BE KEPT CLEAR OF CONCRETE



SEE VALVE BOX
DETAIL D-8

SEE THRUST BLOCK
DETAIL D-14 FOR TEES

FLANGE
JOINT

WATER
MAIN

TWO (2) 4" x 8" x 14"
CONCRETE BLOCKS

MECHANICAL JOINT (M.J.),
INSTALL M.J. PLUG IF
HYDRANT RUN IS OMITTED

6" DIA. BREAK-OFF SPOOL
WITH BREAK-OFF BOLTS
6" MIN. LENGTH &
18" MAX. LENGTH

SEE THRUST BLOCK
DETAIL D-13

FIRE HYDRANTS ARE TO BE
PAINTED WITH RUST
PREVENTIVE PAINT
(BRIGHT SILVER)

TOP OF
SIDEWALK

2"

BURY PIPE

2'-6"

1' MIN.

UNDISTURBED
EARTH

2' - 6"

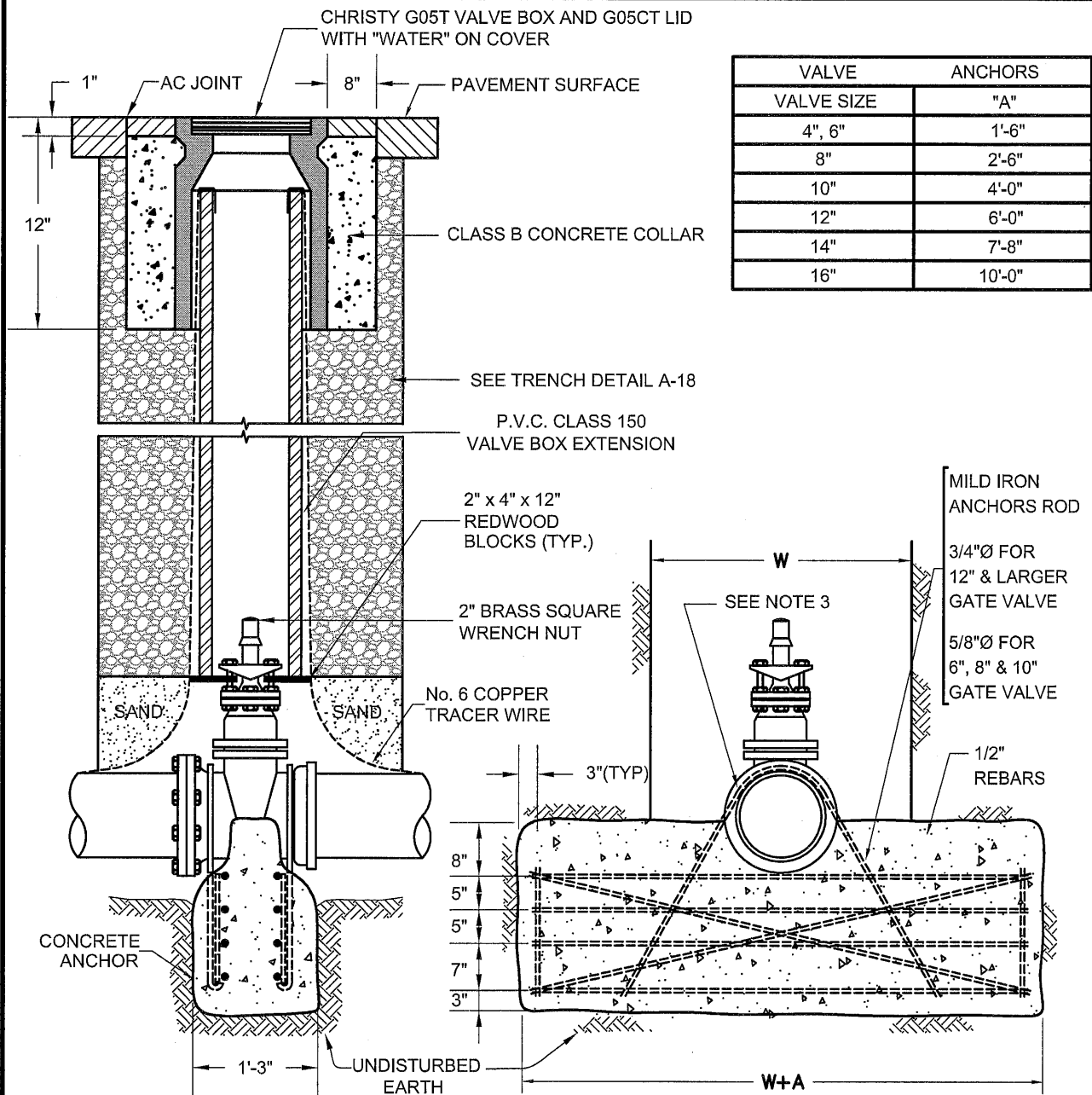
GATE VALVE ANCHOR REQUIRED WHEN VALVE IS
NOT CONNECTED BY FLANGE JOINT TO MAIN TEE

CITY OF MOUNTAIN VIEW
PUBLIC WORKS DEPARTMENT
STANDARD DETAIL

FIRE HYDRANT

Revision		Date	Approved
Drawn: QT	Date: 10-31-14		
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APPROVED BY: No. 57093			
<i>Jacqueline CA Solomon</i>			
10/31/14	42-31-15	57093	
DATE	EXP.	R.C.E. NO.	

FILE NO. D-7



NOTES:

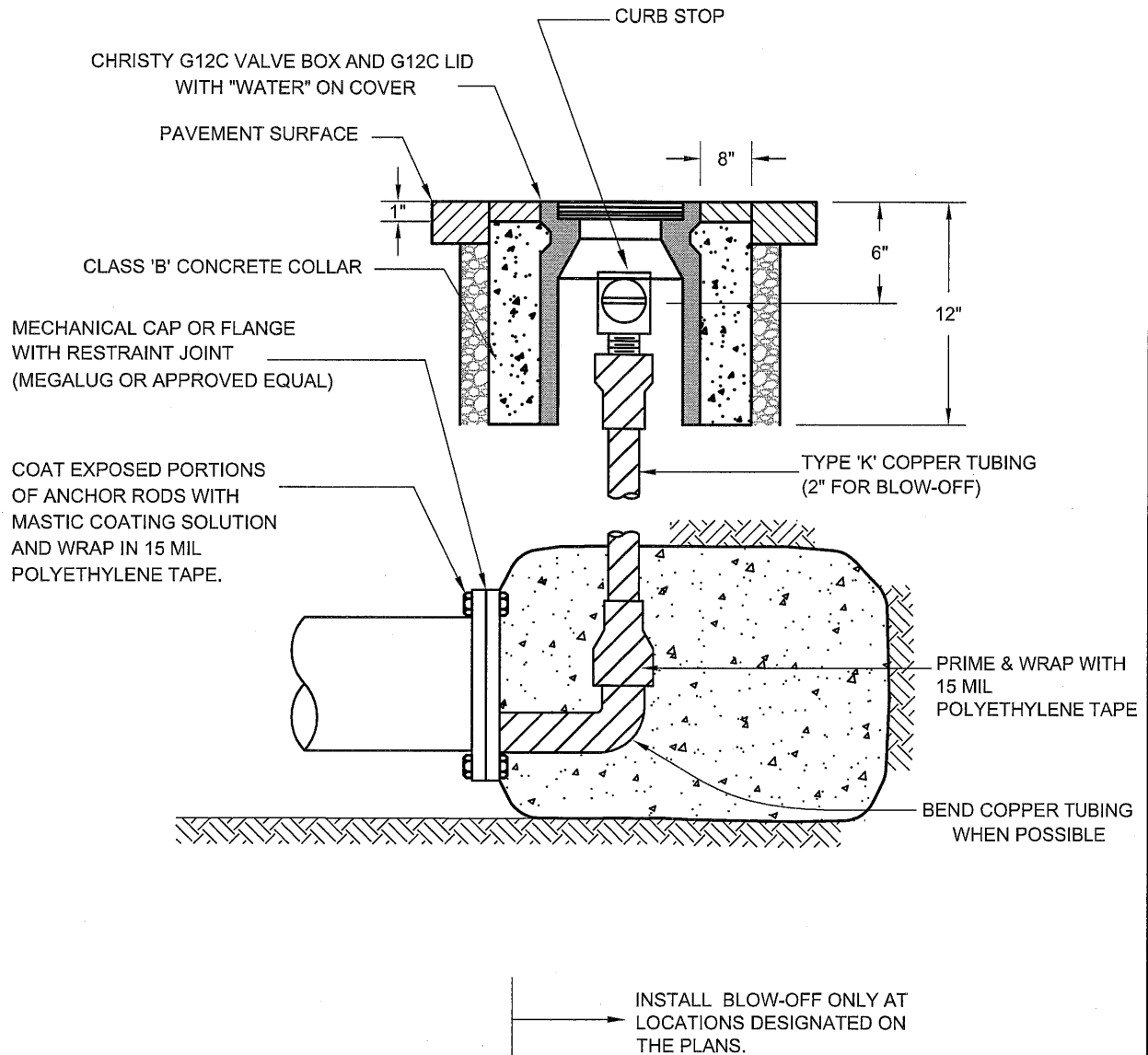
1. WHEN THERE IS A NEED TO RAISE VALVE COVER TO MEET NEW GRADE, ONLY ONE ADDITIONAL RING MAY BE ADDED.
2. FLANGES, BOLTS, AND NUTS SHALL BE KEPT CLEAR OF CONCRETE.
3. COAT EXPOSED PORTIONS OF ANCHOR RODS WITH A MASTIC COATING SOLUTION AND WRAP IN 10 MIL POLYETHYLENE TAPE.

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APPROVED BY: <i>Jacqueline CA Solomon</i>			
10/31/14		57093	
DATE		EXP.	R.C.E. NO.

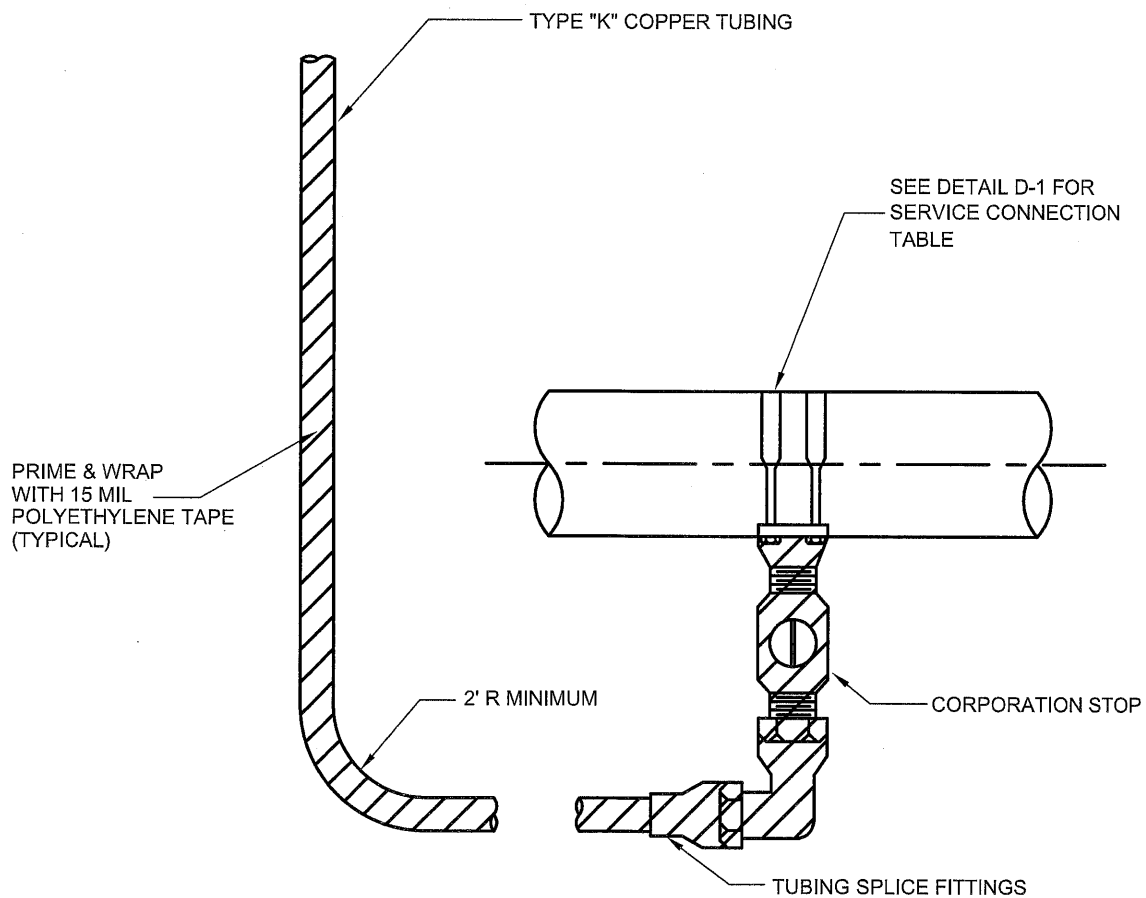
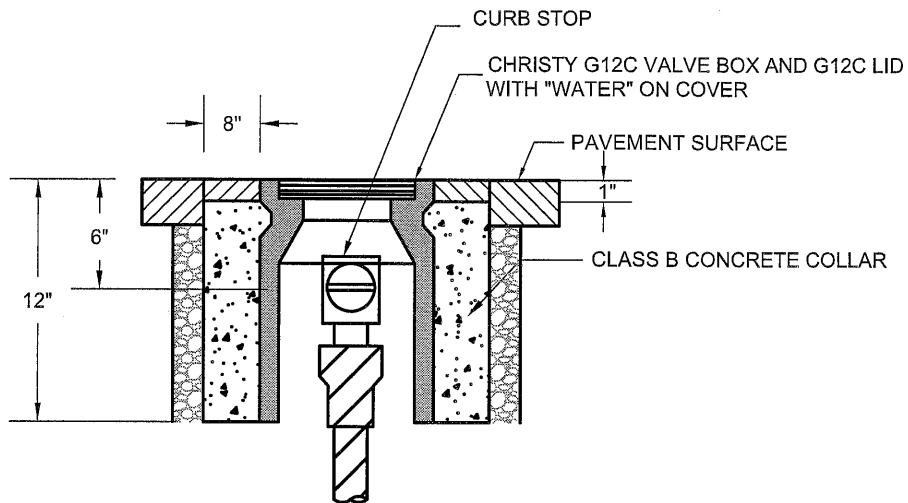
CITY OF MOUNTAIN VIEW
PUBLIC WORKS DEPARTMENT
STANDARD DETAIL

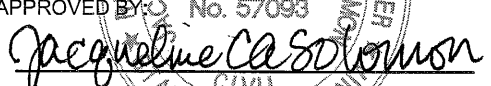
GATE VALVE BOX AND ANCHOR

FILE NO. D-8



Revision Drawn: Q7 Checked: LA			Date: 10-31-14 Scale: NTS			CITY OF MOUNTAIN VIEW PUBLIC WORKS DEPARTMENT STANDARD DETAIL		
APPROVED BY: <i>Jaqueline A. Solomon</i> 10/31/14 DATE			No. 57093 10-31-14 EXP			BLOW-OFF AT END OF MAIN		
			57093 R.C.E. NO.			FILE NO. D-9		



Revision		Date	Approved
Drawn : QT	Date : 10-31-14		
Checked : LA	Scale : NTS		
APPROVED BY: No. 57093			
 10/31/14 57093 DATE EXP. R.C.E. NO.			


CITY OF MOUNTAIN VIEW
PUBLIC WORKS DEPARTMENT
STANDARD DETAIL

2" BLOW-OFF VALVE

FILE NO. D-10



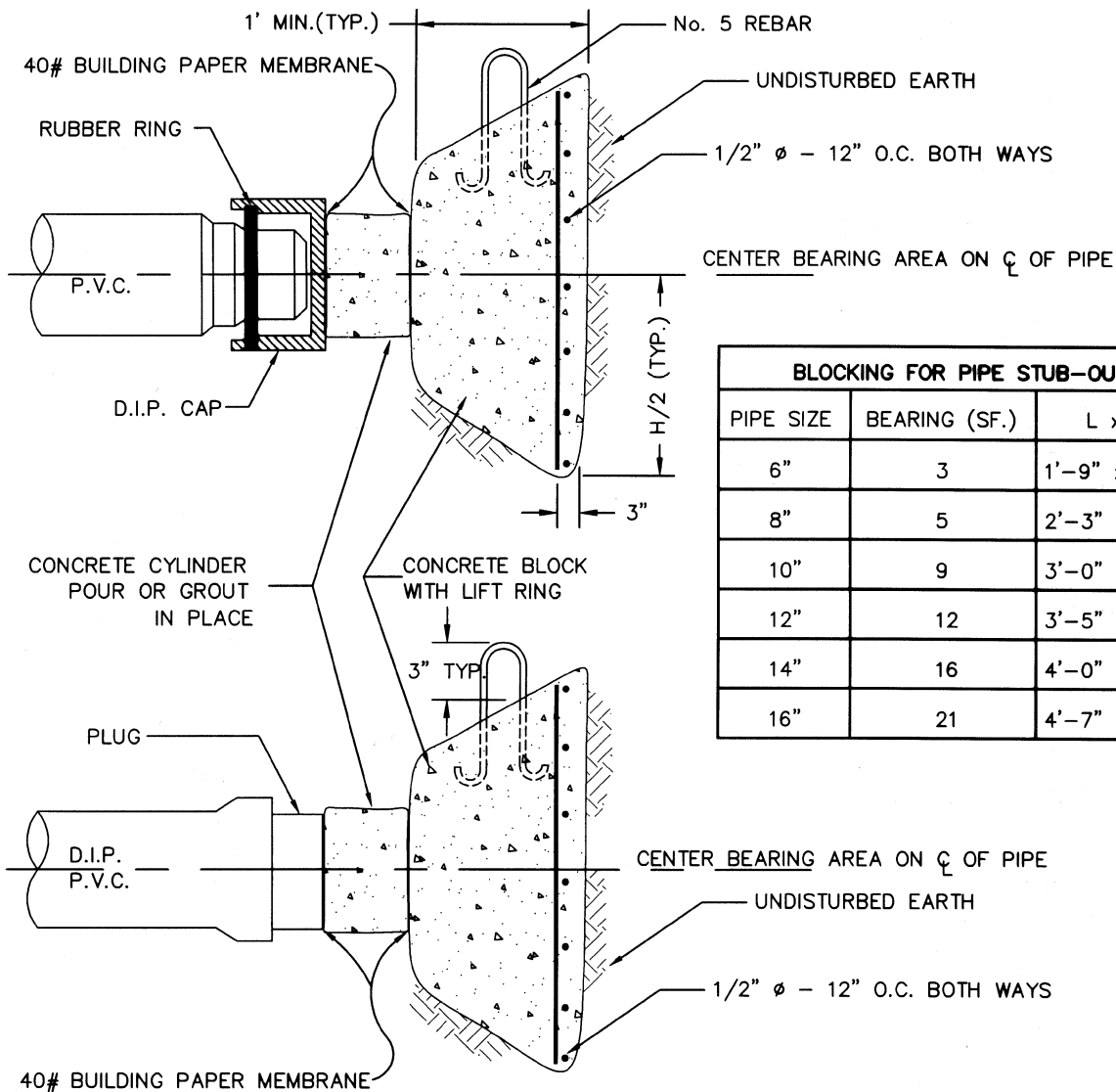
1. INSTALL ARV ABOVE 100 YEAR FLOODPLAIN
2. PAINT METAL BOX AND DOOR, BOTH INSIDE AND OUTSIDE, WITH ONE COAT OF VINYL WASH PRIMER AND ONE COAT OF DARK OLIVE GREEN ENAMEL.
3. USE SAME DIAMETER SEAMLESS COPPER TUBING AS REQUIRED SIZE OF AIR VACUUM RELIEF VALVE.
4. INSTALLATION OF ARVS AT END OF MAINS REQUIRE APPROVAL OF CITY ENGINEER.

Revision		Date	Approved
Drawn : Q7		Date : 10-31-14	
Checked : LA		Scale : NTS	
APPROVED BY:		No. 57093	
			
10/31/14	12-31-15	57093	
DATE	EXP.	R.C.E. NO.	

CITY OF MOUNTAIN VIEW
PUBLIC WORKS DEPARTMENT
STANDARD DETAIL

AIR RELIEF VALVE

FILE NO. D-11



BLOCKING FOR PIPE STUB-OUT		
PIPE SIZE	BEARING (SF.)	L x H
6"	3	1'-9" x 1'-9"
8"	5	2'-3" x 2'-3"
10"	9	3'-0" x 3'-0"
12"	12	3'-5" x 3'-5"
14"	16	4'-0" x 4'-0"
16"	21	4'-7" x 4'-7"

**CITY OF MOUNTAIN VIEW
DEPARTMENT OF PUBLIC WORKS
STANDARD DETAIL**

**STANDARD
P.V.C. AND D.I.P. STUB-OUT**

Revision _____ Date _____ Approved _____

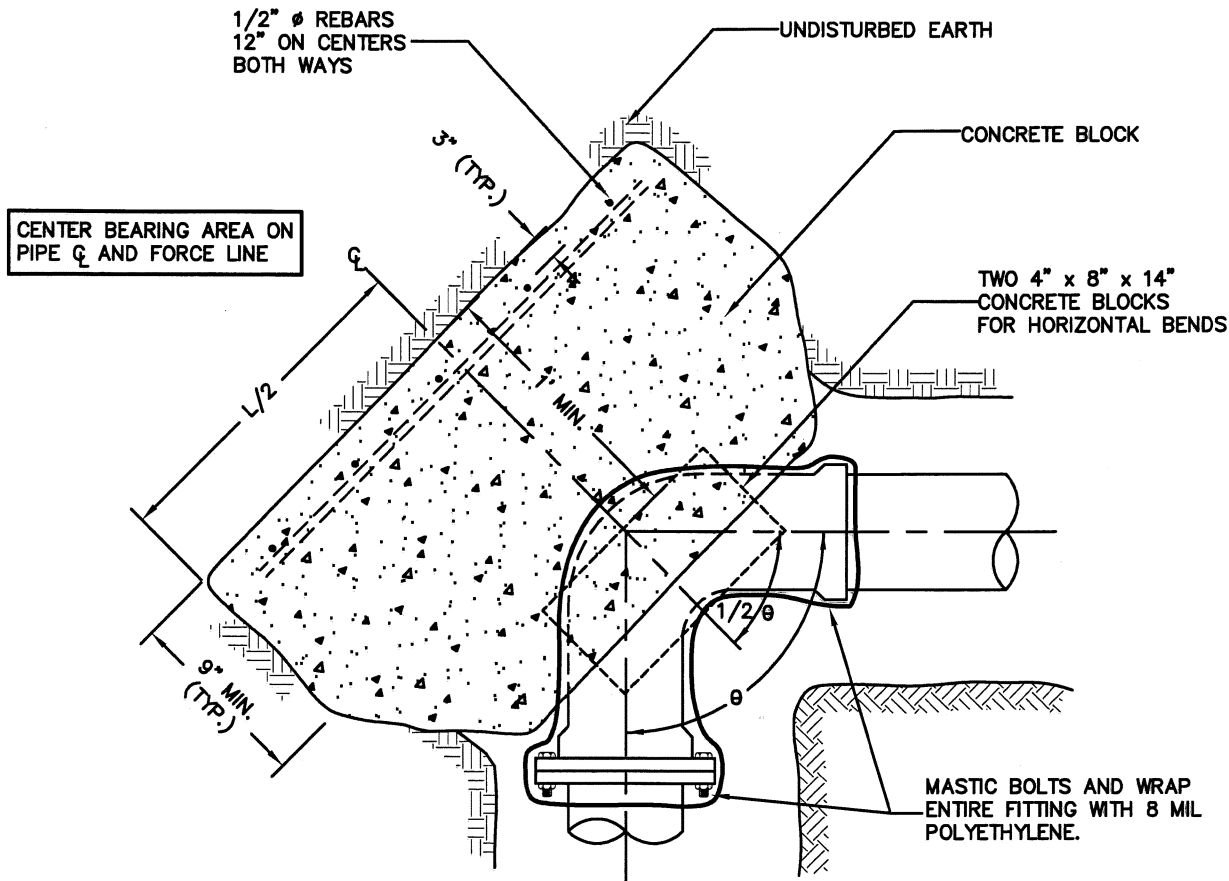
Drawn : Q7 Date : 05-22-99

Checked : RK Scale : NTS

APPROVED BY: No. 27089
EXP. 03-31-01
ASSISTANT PUBLIC WORKS DIRECTOR

06-29-99 DATE 27089 R.C.E. NO.

FILE NO. **D-12**



NOTE:

FLANGES, BOLTS, AND NUTS SHALL BE KEPT CLEAR OF CONCRETE

H = HEIGHT
L = WIDTH

PIPE SIZE	REQUIRED AREA - SQ. FT.						DIMENSIONS - L x H					
	5 5/8"	11 1/4"	22 1/2"	45°	90°		5 5/8"	11 1/4"	22 1/2"	45°	90°	
6"	1	1	2	3	5	1'-0" x 1'-0"	1'-0" x 1'-0"	1'-5" x 1'-5"	1'-9" x 1'-9"	2'-3" x 2'-3"		
8"	1	1	2	4	8	1'-0" x 1'-0"	1'-0" x 1'-0"	1'-5" x 1'-5"	2'-0" x 2'-0"	2'-10" x 2'-10"		
10"	1	2	4	7	12	1'-0" x 1'-0"	1'-5" x 1'-5"	2'-0" x 2'-0"	2'-8" x 2'-8"	3'-5" x 3'-5"		
12"	1	3	5	9	17	1'-0" x 1'-0"	1'-9" x 1'-9"	2'-3" x 2'-3"	3'-0" x 3'-0"	4'-2" x 4'-2"		
14"	2	3	7	13	23	1'-5" x 1'-5"	1'-9" x 1'-9"	2'-8" x 2'-8"	3'-6" x 3'-6"	4'-10" x 4'-10"		
16"	2	4	8	16	29	1'-5" x 1'-5"	2'-0" x 2'-0"	2'-10" x 2'-10"	4'-0" x 4'-0"	5'-5" x 5'-5"		

CITY OF MOUNTAIN VIEW
DEPARTMENT OF PUBLIC WORKS
STANDARD DETAIL

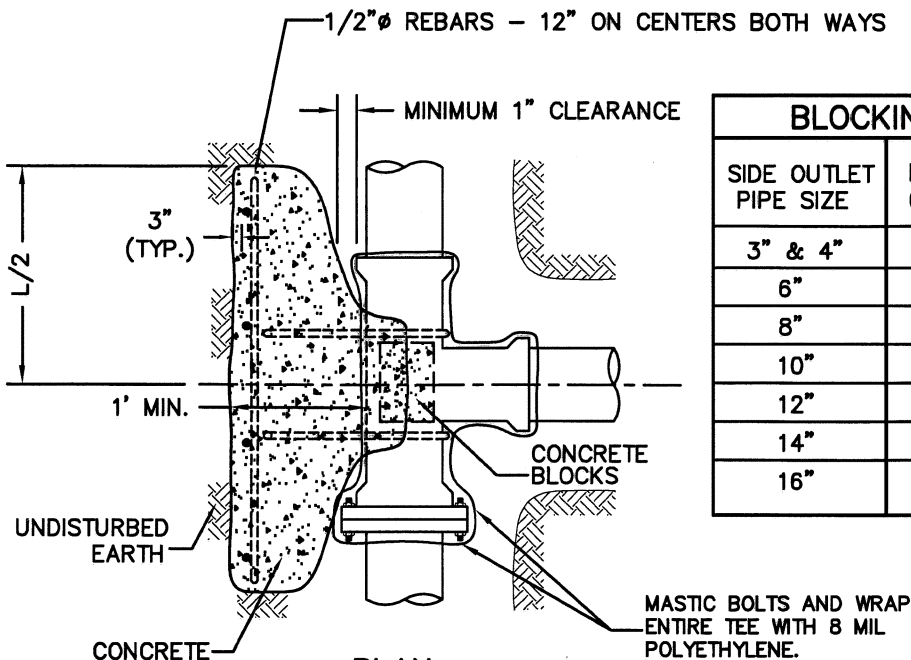
**STANDARD THRUST BLOCK
FOR
HORIZONTAL AND VERTICAL DOWNWARD BENDS**

Revision : QT Date : 02-25-05
Checked : RK Scale : NTS

APPROVED BY: *James R. K...*
ASSISTANT PUBLIC WORKS DIRECTOR

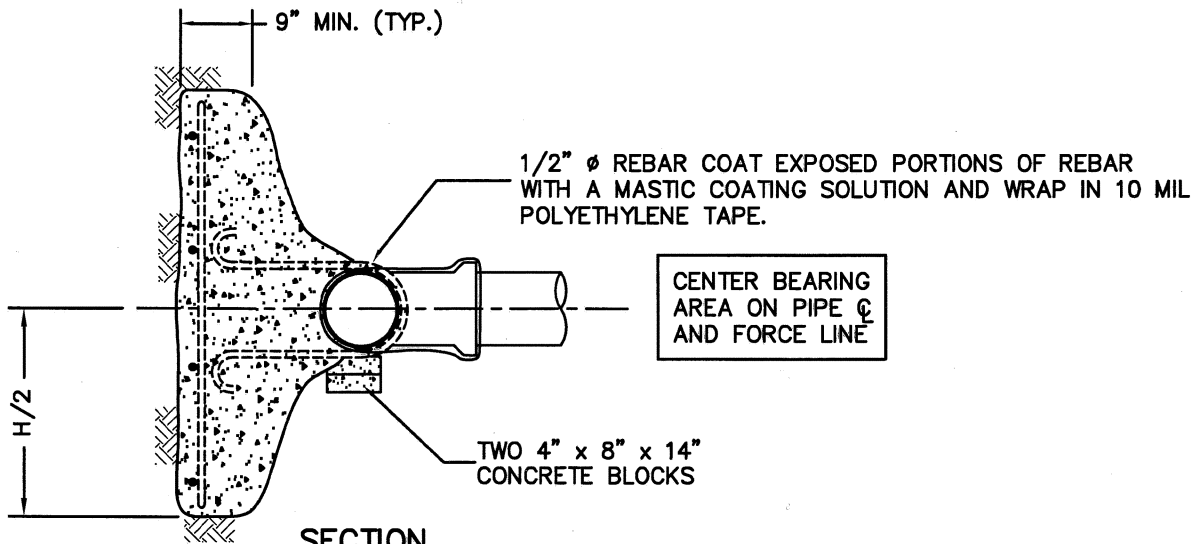
02-25-05 DATE 03-31-07 EXP. 27089 R.C.E. NO.

FILE NO. D-13



BLOCKING FOR PIPE TEES		
SIDE OUTLET PIPE SIZE	BEARING (S.F.)	L x H
3" & 4"	2	1'-5" x 1'-5"
6"	3	1'-9" x 1'-9"
8"	5	2'-3" x 2'-3"
10"	9	3'-0" x 3'-0"
12"	12	3'-5" x 3'-5"
14"	16	4'-0" x 4'-0"
16"	21	4'-7" x 4'-7"

PLAN



SECTION

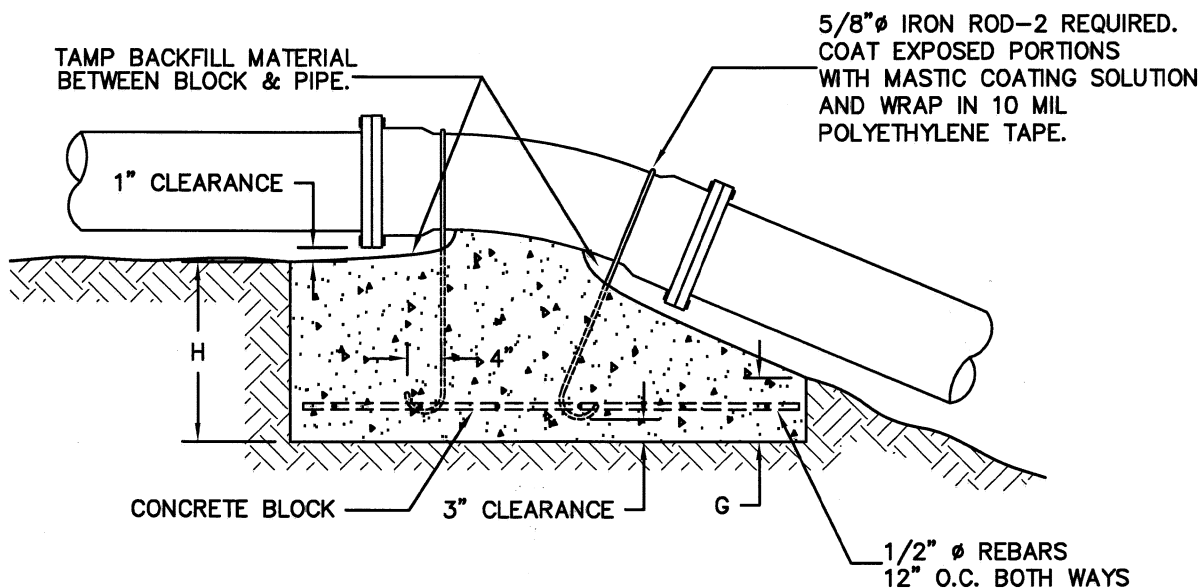
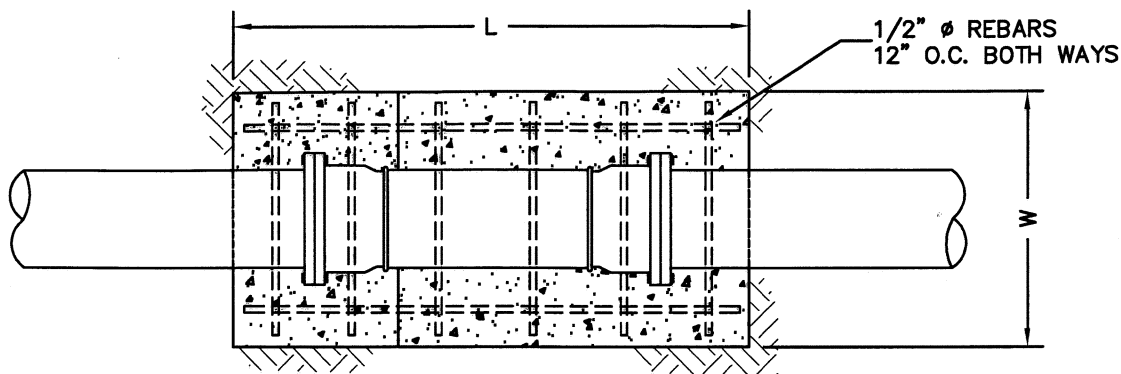
NOTE:

FLANGES, BOLTS, AND NUTS SHALL BE KEPT CLEAR OF CONCRETE.

Revision		Date	Approved
Drawn : QT		Date : 02-25-05	
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APPROVED BY: <i>[Signature]</i> ASSISTANT PUBLIC WORKS DIRECTOR			
02-25-05 DATE	03-31-07 EXP.	27089 R.C.E. NO.	

CITY OF MOUNTAIN VIEW
DEPARTMENT OF PUBLIC WORKS
STANDARD DETAIL

**STANDARD THRUST BLOCK
FOR TEES**



THRUST BLOCK DIMENSION—UPWARD THRUST												
PIPE SIZE	11 1/4° BEND				22 1/2° BEND				45° BEND			
	L	W	H	G	L	W	H	G	L	W	H	G
6"	2'0"	2'0"	1'0"	9"	2'0"	2'0"	2'0"	1'0"	3'0"	2'0"	2'0"	6"
8"	2'0"	2'0"	1'0"	9"	3'0"	2'0"	2'0"	1'0"	4'6"	2'0"	3'0"	6"
10"	3'0"	2'0"	2'0"	1'8"	4'0"	2'0"	2'0"	1'0"	6'0"	2'0"	3'8"	6"
12"	3'0"	2'0"	2'0"	1'8"	6'0"	2'0"	2'0"	1'0"	7'0"	2'6"	4'0"	6"

NOTE:

FLANGES, NUTS AND BOLTS SHALL BE KEEP CLEAR OF CONCRETE.

CITY OF MOUNTAIN VIEW
DEPARTMENT OF PUBLIC WORKS
STANDARD DETAIL

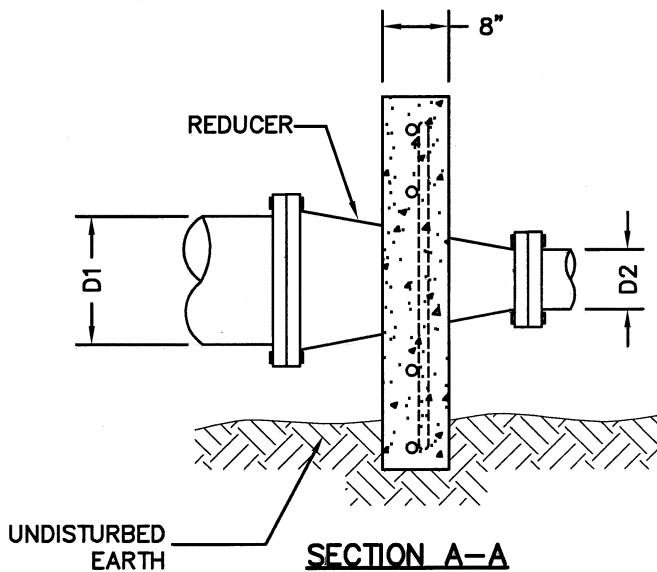
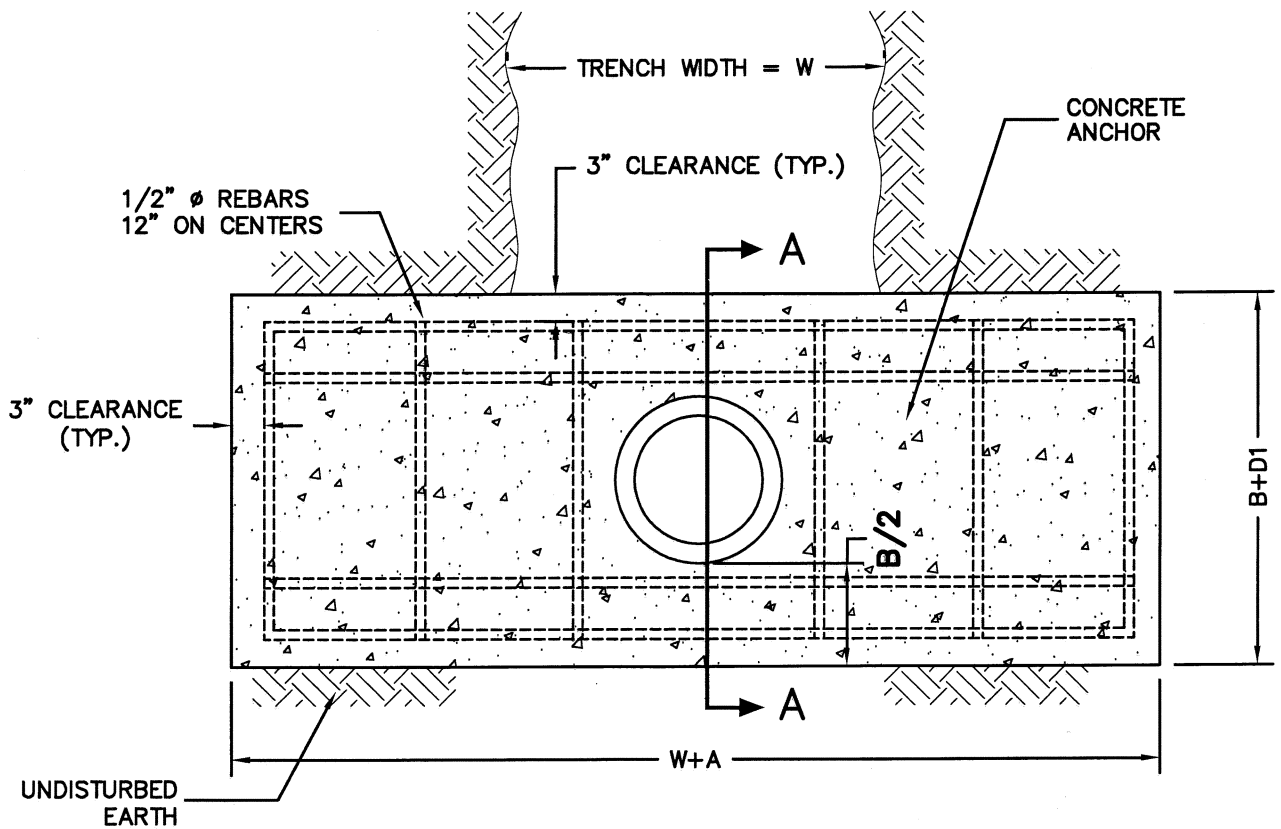
**STANDARD ANCHOR
FOR UPWARD THRUST**

Revision : QT Date : 02-25-05 Approved :
Checked : RK Scale : NTS

APPROVED BY: *James K. [Signature]*
ASSISTANT PUBLIC WORKS DIRECTOR

02-25-05 DATE 03-31-07 EXP. 27089 R.C.E. NO.

FILE NO. **D-15**



ANCHORS FOR REDUCER		
REDUCER SIZE D1 x D2	A	B
12"x10"	2'-0"	2'-0"
12"x 8"	2'-6"	2'-0"
12"x 6"	3'-2"	2'-0"
8" x 6"	2'-0"	1'-4"
8" x 4"	2'-10"	1'-4"
6" x 4"	1'-4"	1'-4"

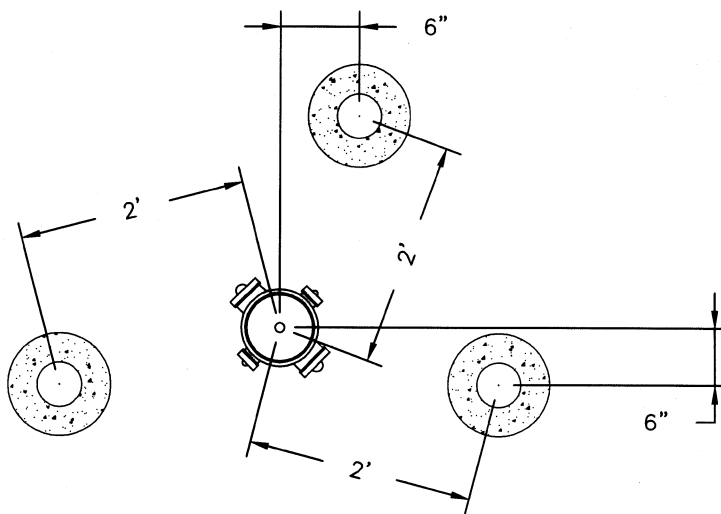
NOTE:

REDUCER ANCHOR IS REQUIRED ONLY WHEN LARGER CONNECTION JOINT IS OTHER THAN FLANGED

Revision		Date	Approved
Drawn : QT		Date : 02-25-05	
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APPROVED BY: <i>Timothy K. Smith</i> ASSISTANT PUBLIC WORKS DIRECTOR			
02-25-05 DATE	03-31-07 EXP.	27089 R.C.E. NO.	

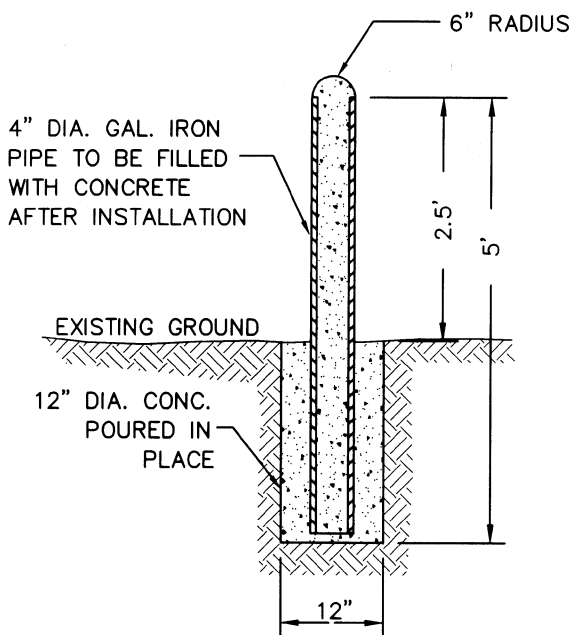
CITY OF MOUNTAIN VIEW
DEPARTMENT OF PUBLIC WORKS
STANDARD DETAIL

STANDARD REDUCER ANCHOR



CL STREET

POST LOCATIONS

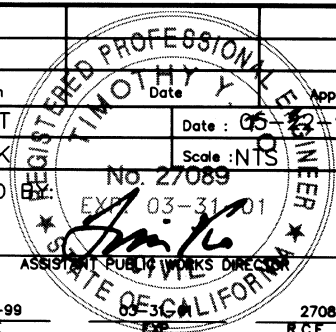


NOTE:

THE 4" IRON PIPE SHALL BE COATED WITH ZINC CHROMATE PRIMER BEFORE INSTALLATION.

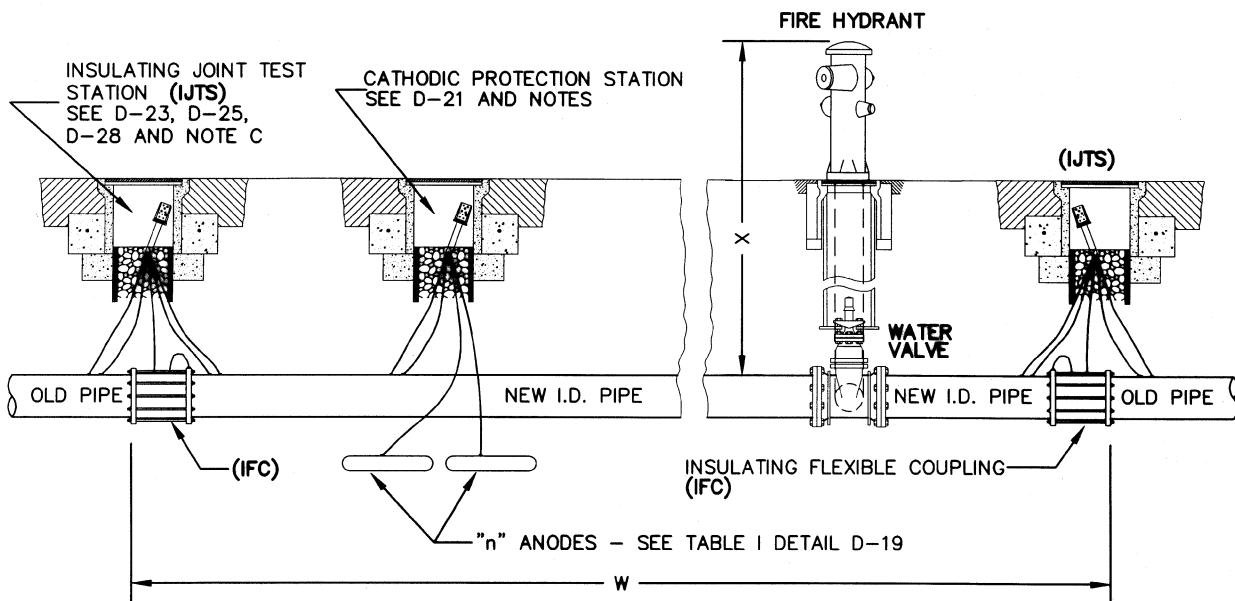
**CITY OF MOUNTAIN VIEW
DEPARTMENT OF PUBLIC WORKS
STANDARD DETAIL**

FIRE HYDRANT GUARD POST



Revision	Date	Approved
Drawn : QT	Date : 05-12-99	
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APPROVED BY: <i>[Signature]</i>		
06-29-99	27089	
DATE	R.C.E. NO.	

FILE NO. D-17



NOTES: TYPICAL CATHODIC PROTECTION SYSTEM

A. POLYETHYLENE ENCASED D.I. PIPE AND FITTINGS WITH BONDED JOINTS.
(SEE D-26 FOR BONDING REQUIREMENTS).

B. DETERMINE ANODE TEST STATION (ATS) REQUIREMENTS BY THE FOLLOWING STEPS:

STEP 1: DETERMINE LENGTH (L) BY THE FOLLOWING FORMULA:

$$L = W + N (X + 5)$$

WHERE N = NUMBER OF FIRE HYDRANTS
X & W = DEFINED AS SHOWN ABOVE

STEP 2: DETERMINE SOIL RESISTIVITY OF SOIL AT PROPOSED ATS.

STEP 3: DETERMINE THE NUMBER OF "n" OF ANODES TO BE INSTALLED
FROM TABLE I, D-19

C. INSULATING FITTING NOT REQUIRED FOR CONNECTION TO EXISTING
NON-METALLIC PIPE. PROVIDE 2-WIRE TEST STATION AT D.I. PIPE
ENDS PER D-25 WHERE INSULATING FITTINGS ARE NOT REQUIRED.

**CITY OF MOUNTAIN VIEW
DEPARTMENT OF PUBLIC WORKS
STANDARD DETAIL**

**STANDARD CATHODIC PROTECTION SYSTEM
DUCTILE IRON PIPE**

FILE NO. D-18

Revision		Date	Approved
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Checked : RK	Scale : NTS		
APPROVED BY: No. 27089 EXP. 03-31-01 ASSISTANT PUBLIC WORKS DIRECTOR			
06-29-99 DATE	27089 R.C.E. NO.		

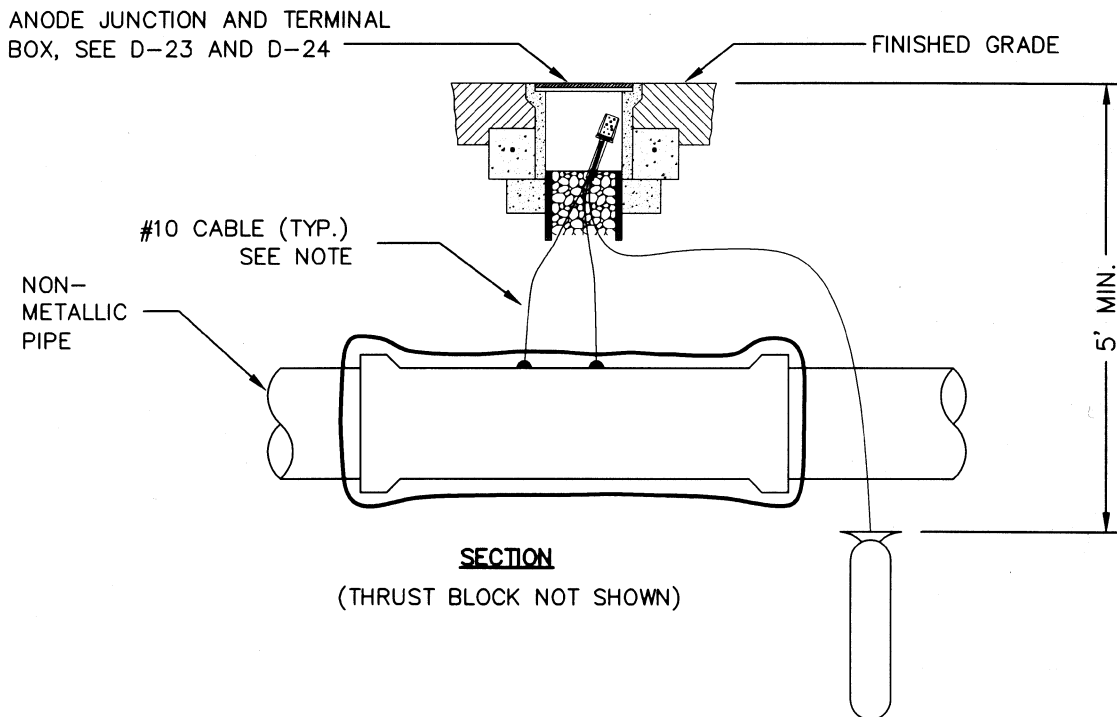
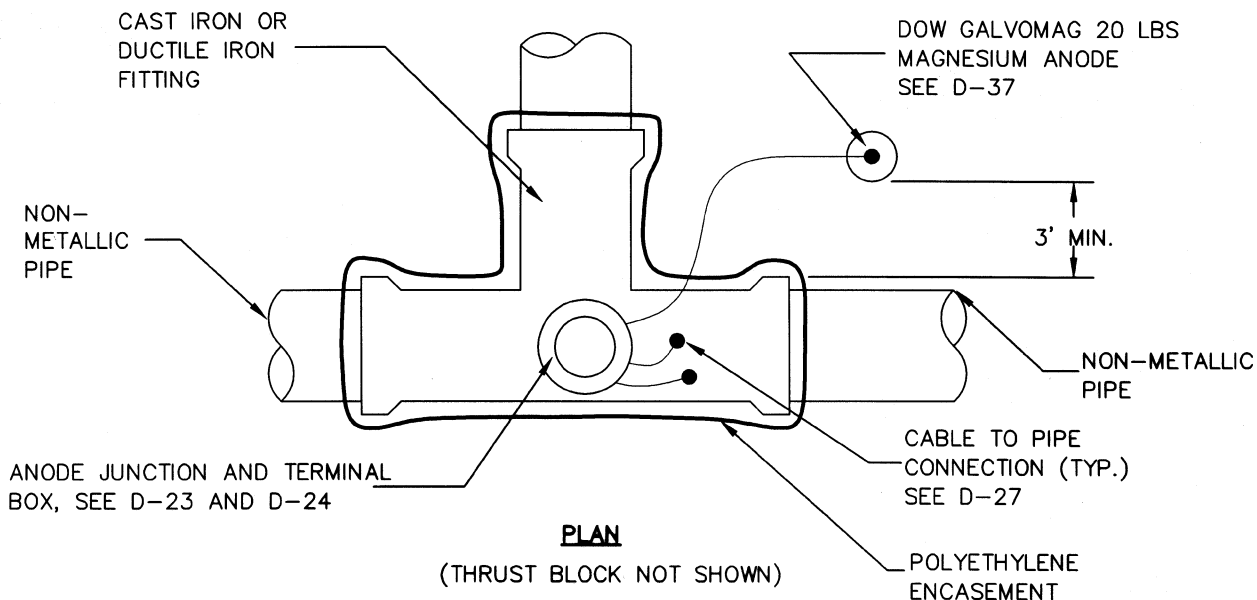
TABLE 1:
NEW DUCTILE IRON PIPE LINES
ANODE REQUIREMENTS FOR WRAPPED PIPE
(WITH KNOWN SOIL RESISTIVITY)

SIZE OF PIPE D (INCHES)	PIPE LENGTH (FEET)	NUMBER "n" OF ANODES REQUIRED SOIL RESISTIVITY (Ohm-m)				
		LESS THAN 10	11 TO 30	31 TO 50	51 TO 70	71 TO 120
4	50	1	1	1	1	1
	100	1	1	1	1	2
	150	1	1	2	2	3
	200	1	1	2	2	3
	250	2	2 (1)	2	3	4
	300	2	2	3	3	5
6	50	1	1	1	1	1
	100	1	1	1	2	2
	150	2 (1)	2 (1)	2	2	3
	200	2 (1)	2	2	3	4
	250	2 (1)	2	3	4	5
	300	3 (1)	2	3	4	6
8	50	1	1	1	1	2
	100	1	1	2	2	3
	150	1	2 (1)	2	3	4
	200	2 (1)	2	3	4	5
	250	3 (1)	3 (2)	4	5	7
	300	3 (1)	3	4	6	8
12	50	1 (1)	1 (1)	1 (1)	2 (2)	3 (3)
	100	2 (1)	2 (2)	2 (2)	4 (3)	5 (5)
	150	3 (1)	3 (2)	4 (3)	5 (4)	8 (8)
	200	3 (1)	3 (3)	5 (4)	7 (6)	10 (9)
	250	4 (2)	4 (3)	5 (5)	8 (7)	13 (12)
	300	5 (2)	5 (4)	7 (6)	10 (8)	16 (14)

NOTES:

1. USE 20-POUND MAGNESIUM ANODES PER STANDARD DETAILS (SEE D-37). THE VALUES IN BRACKETS INDICATES THE NUMBER OF 60-POUND ANODES WHICH ARE REQUIRED IN LIEU OF 20-POUND ANODES.
2. IF SOIL RESISTIVITY IS NOT DETERMINED FOR THE LOCATION, USE MAGNESIUM ANODES FOR 71 TO 120 OHM-M SOIL RESISTIVITY.
3. TABULAR VALUES ARE BASED ON POLYETHYLENE ENCASED PIPE AND FITTINGS, BONDED FOR CONTINUITY AND OTHER ELECTRICALLY INSULATED METAL PIPES.

Revision _____ Date _____ Approved _____ Drawn : QT _____ Date : 05-03-99 Checked : RK _____ Scale : NTS APPROVED BY: No. 27089 EXP. 03-31-01 ASSISTANT PUBLIC WORKS DIRECTOR 06-29-99 DATE 27089 R.C.E. NO.		CITY OF MOUNTAIN VIEW DEPARTMENT OF PUBLIC WORKS STANDARD DETAIL STANDARD DUCTILE IRON PIPE ANODE REQUIREMENTS (TABLE 1)
		FILE NO. D-19



NOTE:

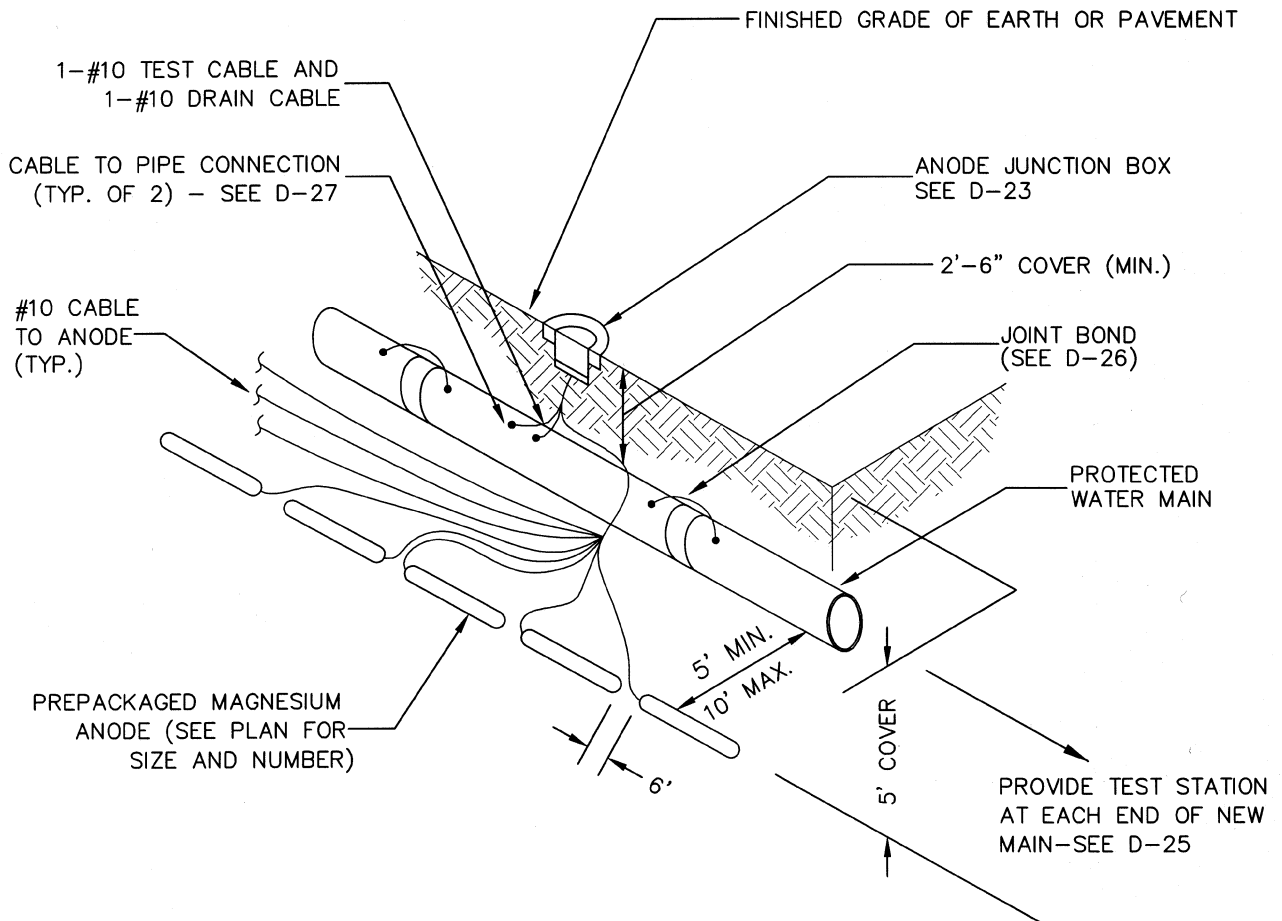
PROVIDE 2-#10 TYPE CP CABLES FROM EACH FITTING AND BOND ALL METAL ELEMENTS PER D-26

Revision	Date	Approved
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ASSISTANT PUBLIC WORKS DIRECTOR		
06-29-99	27089	
DATE	R.C.E. NO.	

**CITY OF MOUNTAIN VIEW
DEPARTMENT OF PUBLIC WORKS
STANDARD DETAIL**

**STANDARD DUCTILE IRON
AND CAST IRON FITTINGS
CATHODIC PROTECTION FOR
NON-METALLIC PIPE**

FILE NO. D-20



**CITY OF MOUNTAIN VIEW
DEPARTMENT OF PUBLIC WORKS
STANDARD DETAIL**

**STANDARD CATHODIC PROTECTION STATION
ANODE INSTALLATION**

FILE NO. **D-21**

Revision	Date	Approved
Drawn : QT	Date : 05-18-99	
Checked : RK	Scale : NTS	
APPROVED BY <i>Timothy Y. Lin</i> No. 27089 EXP. 03-31-01 REGISTERED PROFESSIONAL ENGINEER STATE OF CALIFORNIA		
06-29-99 DATE	03-31-01 EXP.	27089 R.C.E. NO.

Diagram illustrating the installation of a cathodic protection system for a water main. The system includes a #10 anode cable (typical), a #10 test cable, and a #10 drain cable. The anode is connected to a horizontal anode, which is a pipe with a diameter of 5' MIN. to 10' MAX. The distance from the top of the structure to the anode is 2'-6" MIN. The distance from the anode to the water main is 5' MIN. The distance from the water main to the bottom of the structure is V. The distance from the anode to the bottom of the structure is H.

TABLE	
V	H
1'	4.9'
2'	4.7'
3'	4.2'
4'	3.5'

VERTICAL ANODE

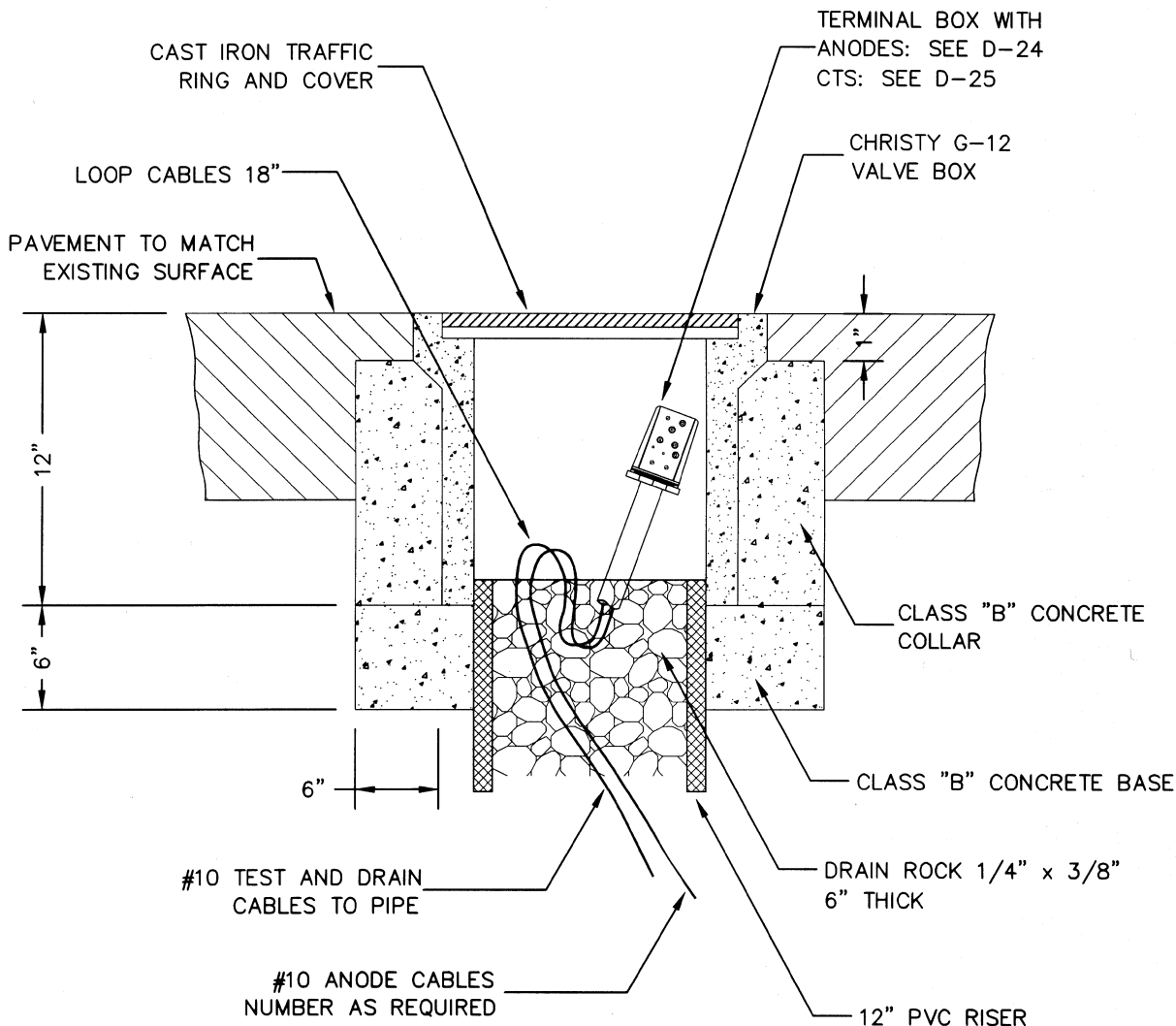
TABLE	
<u>Y</u>	<u>H</u>
1'	4.9'
2'	4.7'
3'	4.2'
4'	3.5'
5'	2.4'
6'	0'

NOTE: ANODES MUST BE AT LEAST 5' FROM PIPE (SEE TABLE). VERTICAL INSTALLATION METHOD REQUIRES 10' O.C. BETWEEN ANODES.

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06-29-99		03-31-01	27089
DATE		EXP.	R.C.E. NO.

STANDARD ALTERNATIVE ANODE INSTALLATION

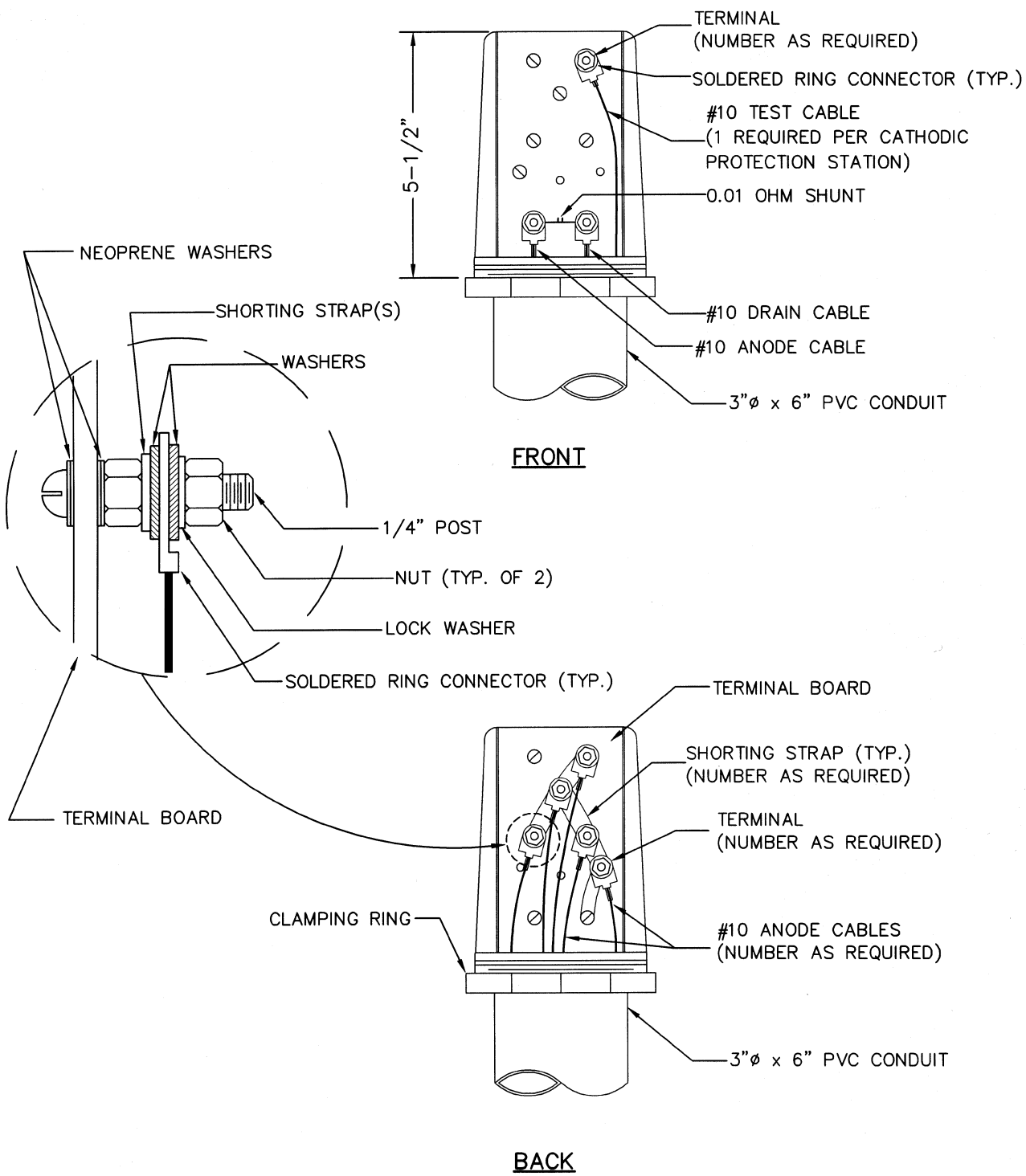
FILE NO. D-22



**CITY OF MOUNTAIN VIEW
DEPARTMENT OF PUBLIC WORKS
STANDARD DETAIL**

**STANDARD TEST AND ANODE
JUNCTION BOX**

Revision	Date	Approved
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Checked : RK	Scale : NTS	
APPROVED BY: <i>Timothy P. [Signature]</i> No. 27089 EXP. 03-31-01 ASSISTANT PUBLIC WORKS DIRECTOR		
06-29-99 DATE	03-31-01 EXP.	27089 R.C.E. NO.

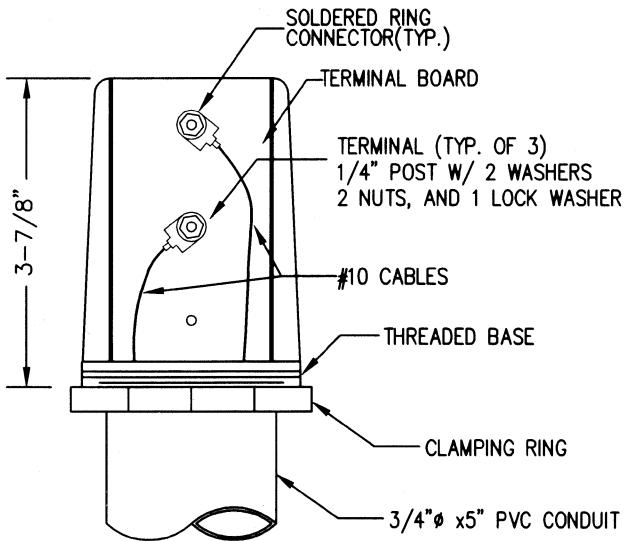
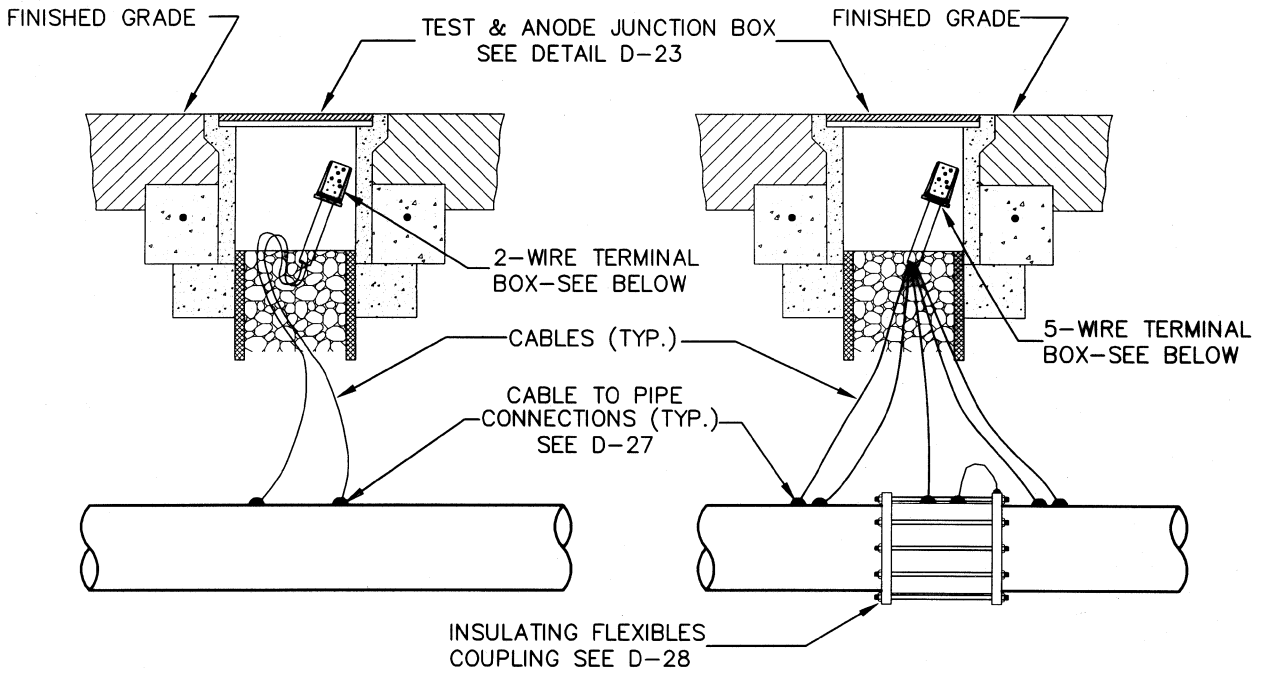


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APPROVED BY: <i>[Signature]</i> No. 27089			
EXP. 03-31-01			
ASSISTANT PUBLIC WORKS DIRECTOR			
06-29-99	03-31-01	27089	
DATE	EXP.	R.C.E. NO.	

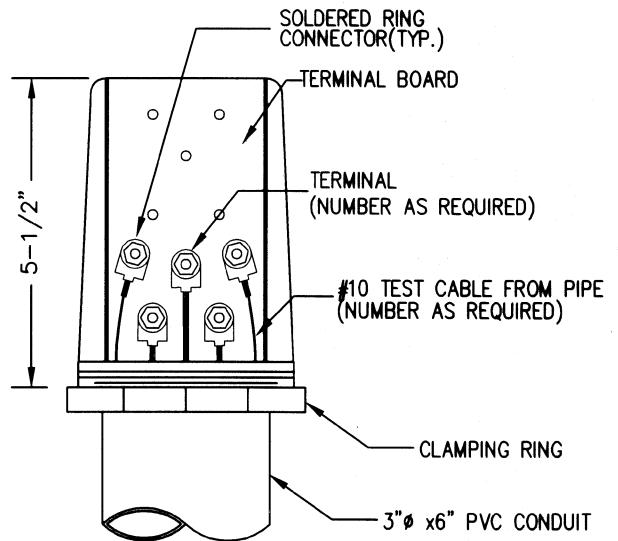
**CITY OF MOUNTAIN VIEW
DEPARTMENT OF PUBLIC WORKS
STANDARD DETAIL**

**STANDARD ANODE TERMINAL BOX
(COVER NOT SHOWN)**

FILE NO. D-24



2-WIRE TERMINAL BOX



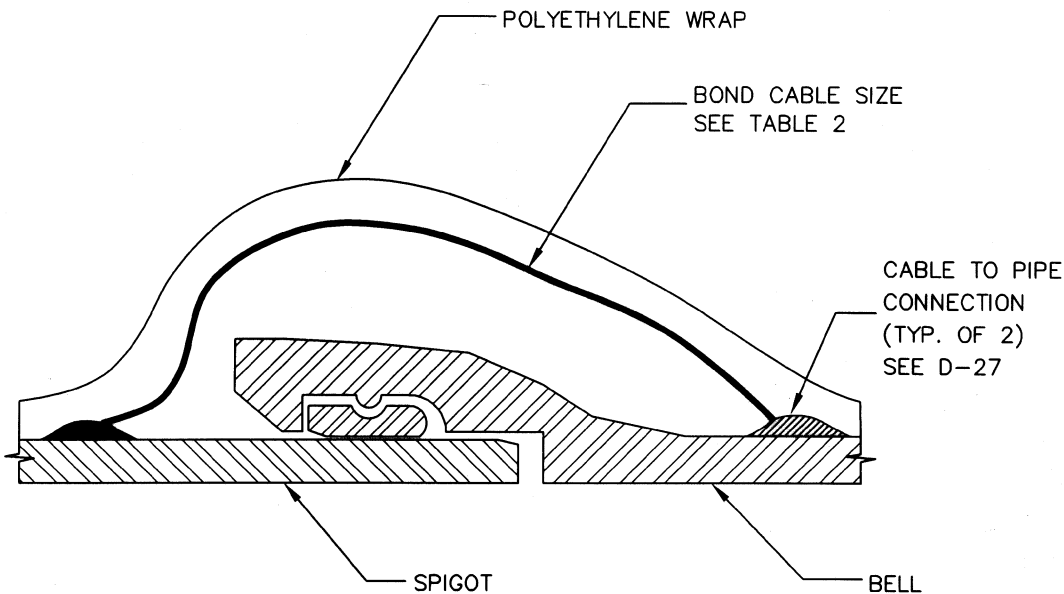
5-WIRE TERMINAL BOX

**CITY OF MOUNTAIN VIEW
DEPARTMENT OF PUBLIC WORKS
STANDARD DETAIL**

**STANDARD TEST STATION & TERMINAL BOX
(BOX COVERS NOT SHOWN)**

FILE NO. **D-25**

Revision		Date	Approved
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APPROVED BY: No. 27089 EXP. 03-31-01 ASSISTANT PUBLIC WORKS DIRECTOR			
06-29-99 DATE	27089 R.C.E. NO.		



NOTE:

BOND DETAIL IS USED FOR MECHANICAL AND PUSH-ON JOINTS

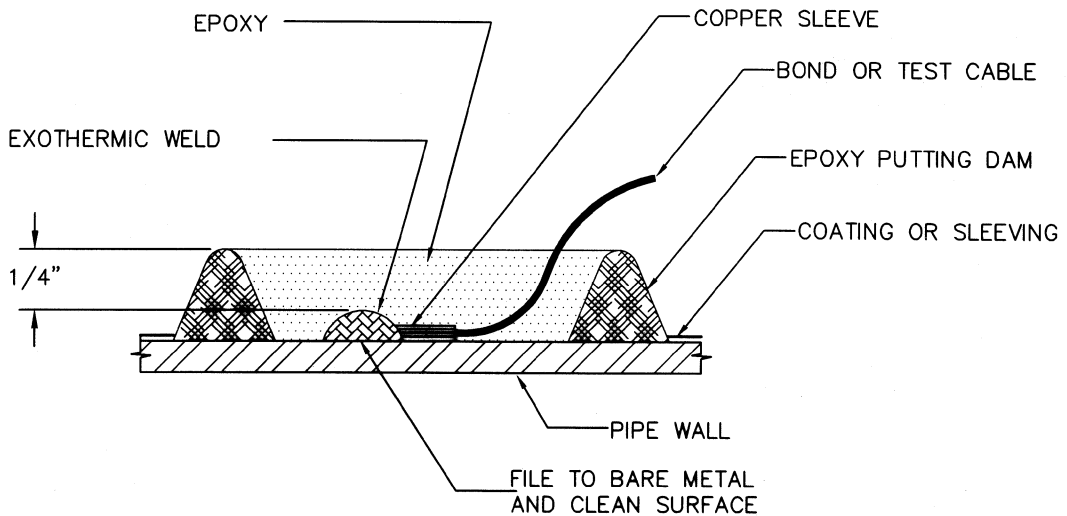
TABLE 2

PIPE SIZE (INCHES)	BOND SIZE (AWG No.)
4 TO 10	#6
12 TO 16	#4
20 TO 24	#2
30 TO 42	#1

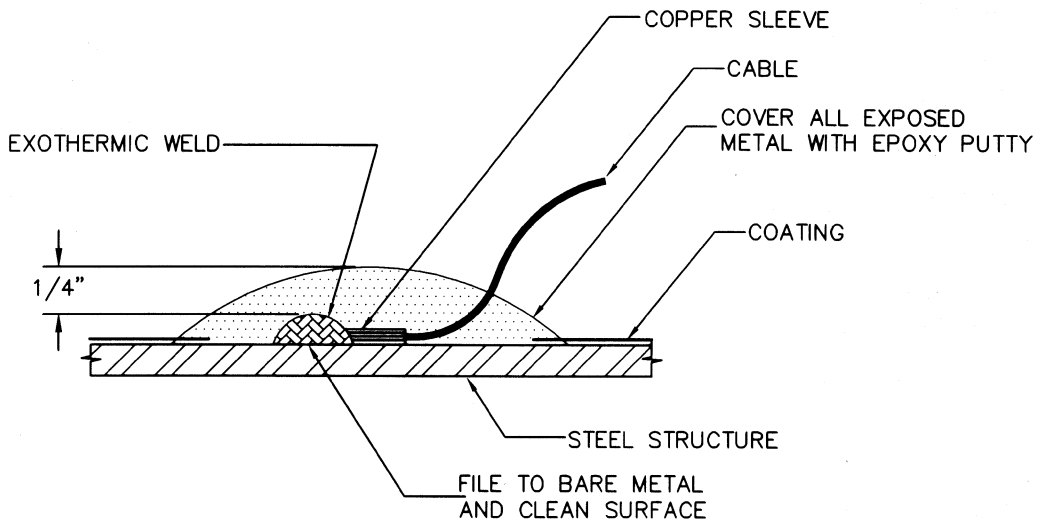
**CITY OF MOUNTAIN VIEW
DEPARTMENT OF PUBLIC WORKS
STANDARD DETAIL**

**STANDARD JOINT BOND
FOR DUCTILE IRON PIPE**

Revision	Date	Approved
Drawn : QT	Date : 05-18-99	
Checked : RK	Scale : NTS	
APPROVED BY: [Signature] No. 27089 P.P. 03-31-01 ASSISTANT PUBLIC WORKS DIRECTOR		
06-29-99 DATE	05-31-01 EXP.	27089 R.C.E. NO.



BELOW GROUND



ABOVE GROUND AND VERTICAL WELDS

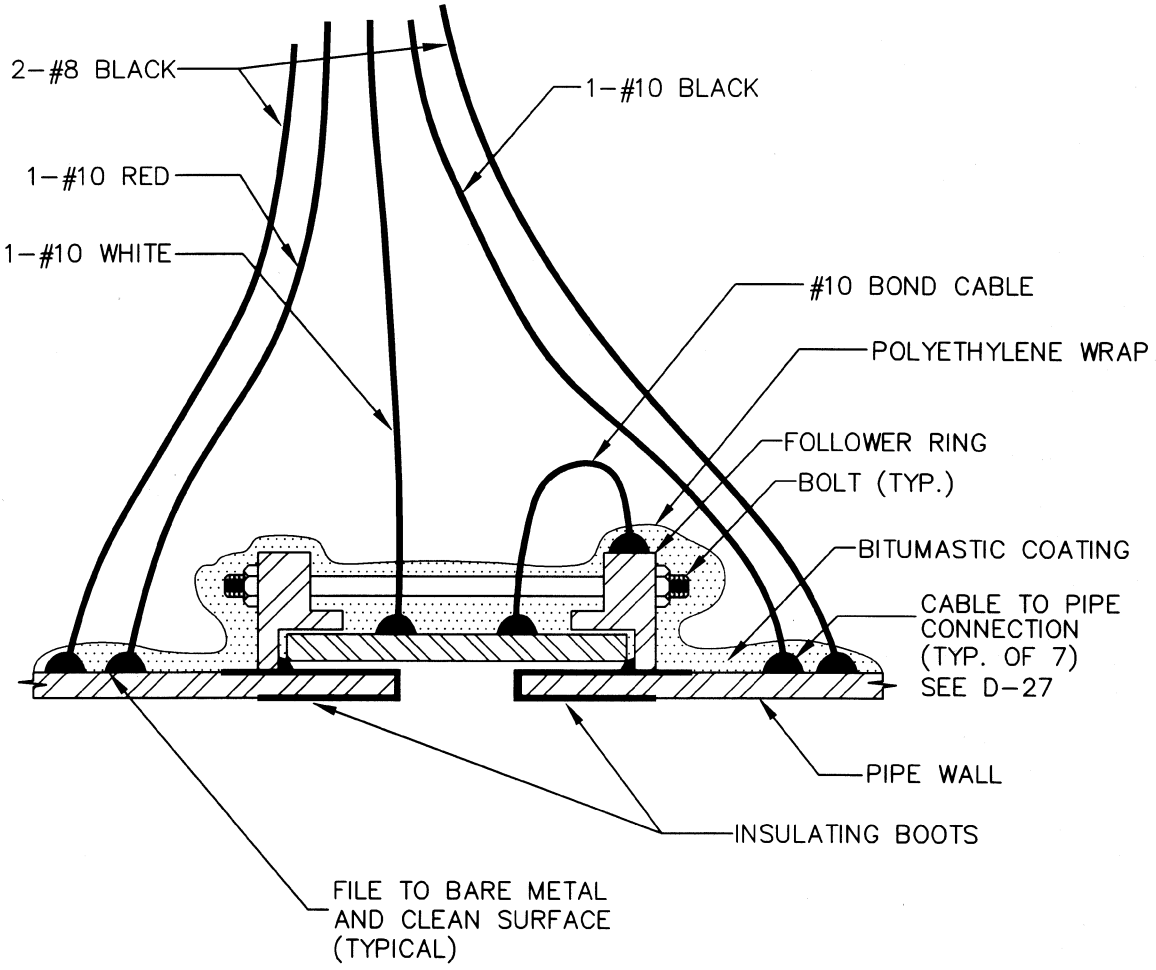
**CITY OF MOUNTAIN VIEW
DEPARTMENT OF PUBLIC WORKS
STANDARD DETAIL**

STANDARD CABLE TO PIPE CONNECTION

Revision	Date	Approved
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APPROVED BY: <i>[Signature]</i>		
No. 27089		
EXP. 03-31-01		
06-29-99	03-31-01	27089
DATE	EXP.	R.C.E. NO.

FILE NO. D-27

CABLES TO TEST BOX-SEE D-25



Revision		Date	Approved
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APPROVED BY: <i>[Signature]</i>			
No. 27089			
EXP. 03-31-01			
ASSISTANT PUBLIC WORKS DIRECTOR			
06-29-99		03-31-01	27089
DATE		EXP.	R.C.E. NO.

CITY OF MOUNTAIN VIEW
DEPARTMENT OF PUBLIC WORKS
STANDARD DETAIL

STANDARD
INSULATING FLEXIBLE COUPLING SECTION

FILE NO. D-28

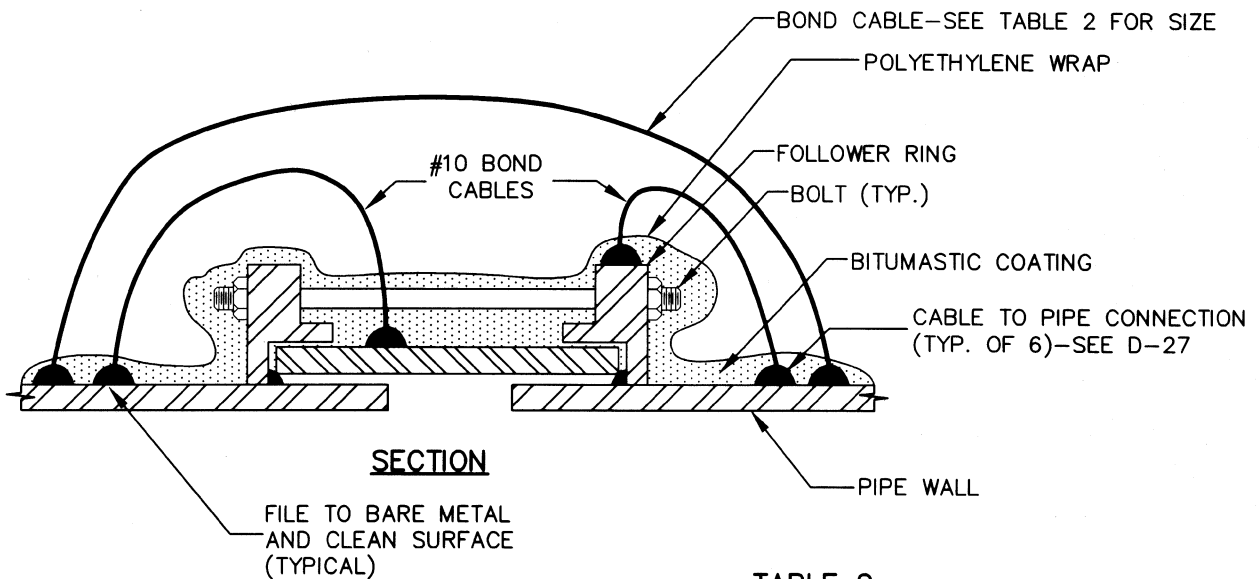
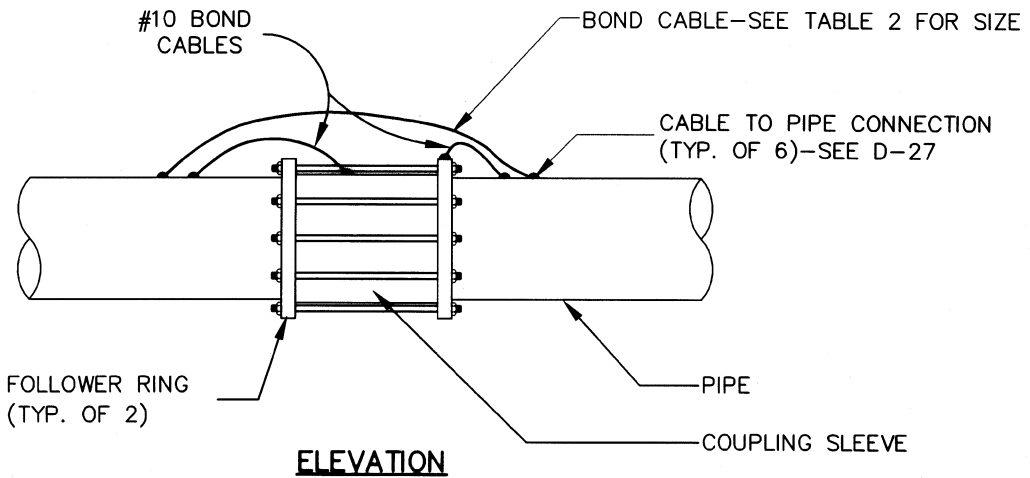


TABLE 2

BOND SIZE

PIPE SIZE (INCHES)	BOND SIZE (AWG No.)
4 TO 10	#6
12 TO 16	#4
20 TO 24	#2
30 TO 42	#1

Revision	Date	Approved
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ASSISTANT PUBLIC WORKS DIRECTOR		
06-29-99	27089	
DATE	R.C.E. NO.	

**CITY OF MOUNTAIN VIEW
DEPARTMENT OF PUBLIC WORKS
STANDARD DETAIL**

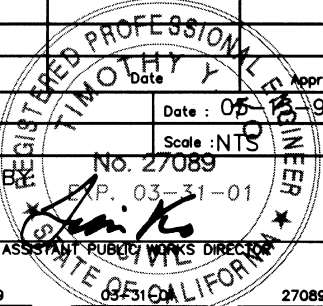
**STANDARD
FLEXIBLE COUPLING BOND**

TABLE II:
NEW COPPER SERVICE LINES
ANODE REQUIREMENTS FOR WRAPPED PIPE
(WITH KNOWN SOIL RESISTIVITY)

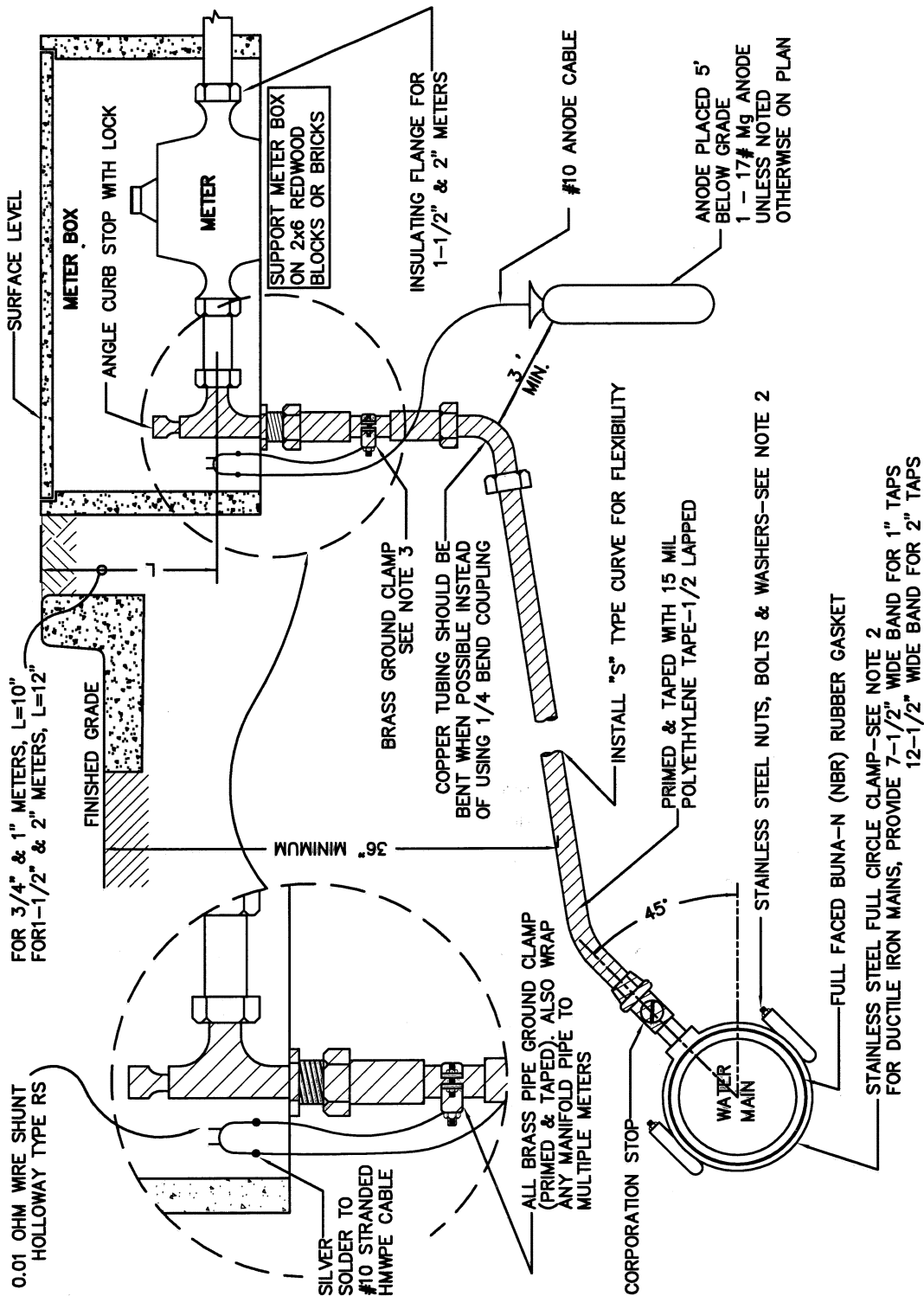
SIZE OF SERVICE (INCHES)	SOIL RESISTIVITY (Ohm-m)				
	LESS THAN 10	11 TO 30	31 TO 50	51 TO 70	71 TO 120
1/2 & 5/8	1 # 12	1 # 12	1 # 12	1 # 17	1 # 17
1, 3/4 & 1-1/4	1 # 12	1 # 12	1 # 17	1 # 17	1 # 17
1-1/2 & 2	1 # 12	1 # 17	1 # 17	1 # 17	1 # 17
2-1/2 & 3	1 # 17	1 # 17	1 # 17	1 # 17	2 # 17

NOTES:

1. USE MAGNESIUM ANODES PER STANDARD DETAILS FOR VALUES BELOW DOUBLE LINE, AND ZINC ANODES PER STANDARD DETAILS FOR VALUES ABOVE DOUBLE LINES.
2. IF SOIL RESISTIVITY IS NOT DETERMINED FOR THE LOCATION, USE (1) 17# MAGNESIUM ANODE FOR SERVICES 1-1/2" AND SMALLER, AND (2) 17# MAGNESIUM ANODES FOR SERVICES LARGER THAN 2" AND UP TO 50 FEET LONG.
3. TABULAR VALUES ARE BASED ON 50 FEET OF SERVICE LINE OR LESS. FOR SERVICE LINES FROM 50 FEET TO 100 FEET LONG, USE 2 TIMES THE TABULAR VALUE.

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Drawn : QT		Date : 05-13-99	
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APPROVED BY		No. 27089	
			
06-29-99		27089	
DATE		R.C.E. NO.	

<p style="text-align: center;">CITY OF MOUNTAIN VIEW DEPARTMENT OF PUBLIC WORKS STANDARD DETAIL</p> <p style="text-align: center;">STANDARD COPPER SERVICE LINE ANODE REQUIREMENTS CORROSION CONTROL DETAILS (TABLE II)</p>	<p>FILE NO. D-30</p>
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NOTES: 1. SEE STANDARD DETAIL D-1 FOR LOCATION PLAN.

2. FIELD APPLY BITUMASTIC 50 ON ALL BARE METAL AND COVER WITH POLYETHYLENE ENCASMENT IN ACCORDANCE WITH AWWA STANDARD C105.
3. USE CLAMP FOR COUPLING TYPE METER. ATTACH SHUNT TO SERVICE WITH SOLDER TYPE TERMINAL RING TO BOLT FOR FLANGED METERS.

CITY OF MOUNTAIN VIEW
DEPARTMENT OF PUBLIC WORKS
STANDARD DETAIL

**STANDARD 2" OR SMALLER
COPPER SERVICE INSTALLATION - D.I.P. MAIN
CORROSION CONTROL DETAILS**

Revision : QT Date : 02-25-05
Checked : RK Scale : NTS

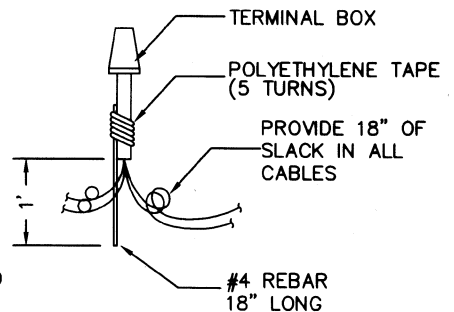
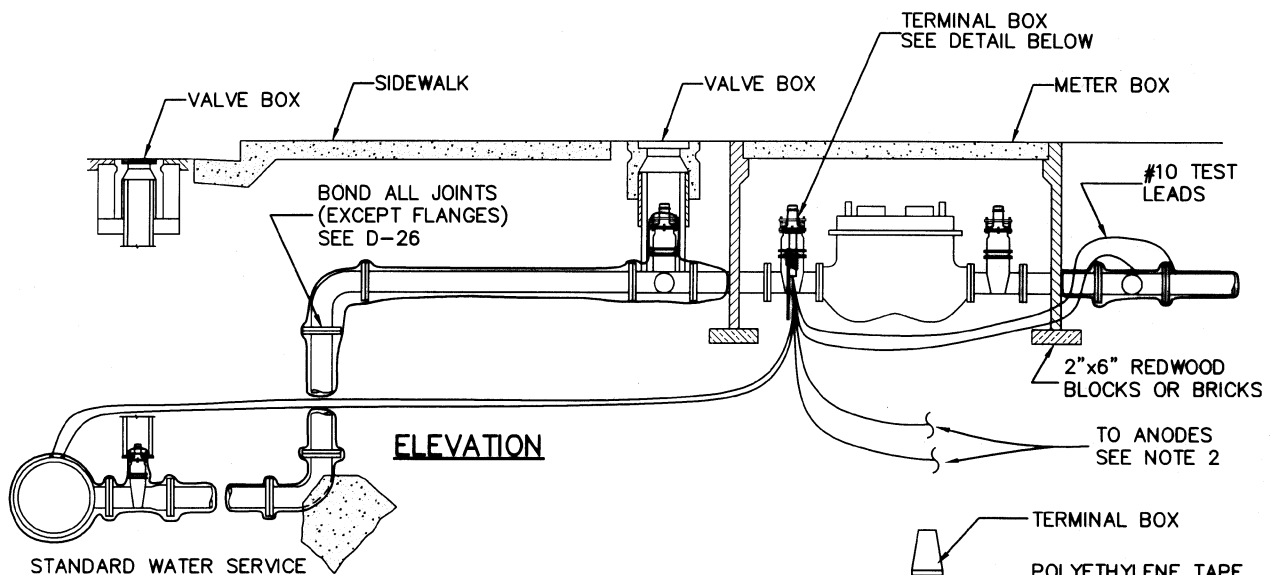
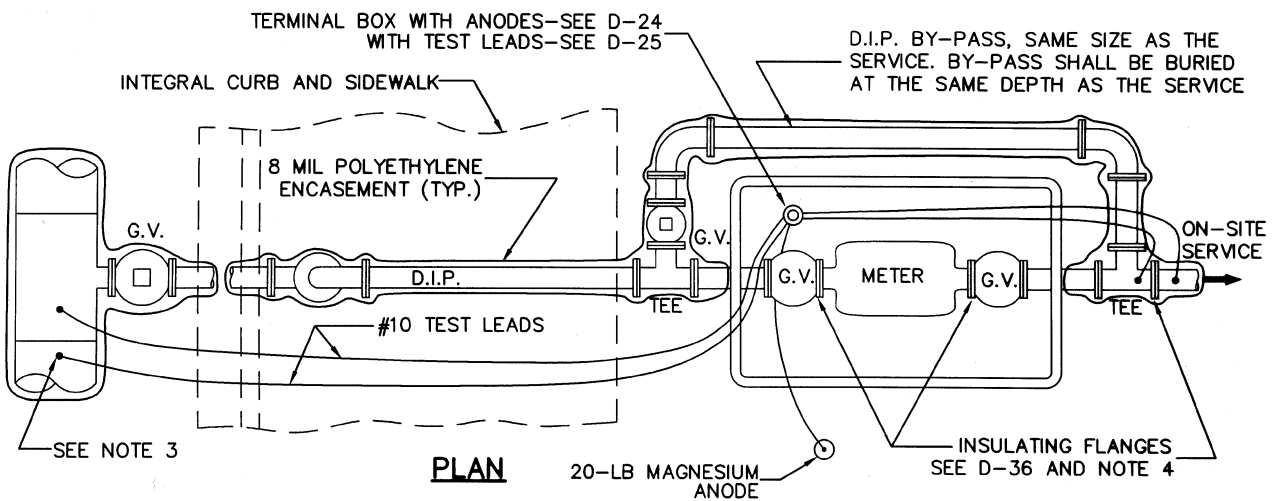
APPROVED BY: *Timothy K. Smith*
ASSISTANT PUBLIC WORKS DIRECTOR

02-25-05
DATE

03-31-07
EXP.

27089
R.C.E. NO.

FILE NO. **D-31**



NOTES:

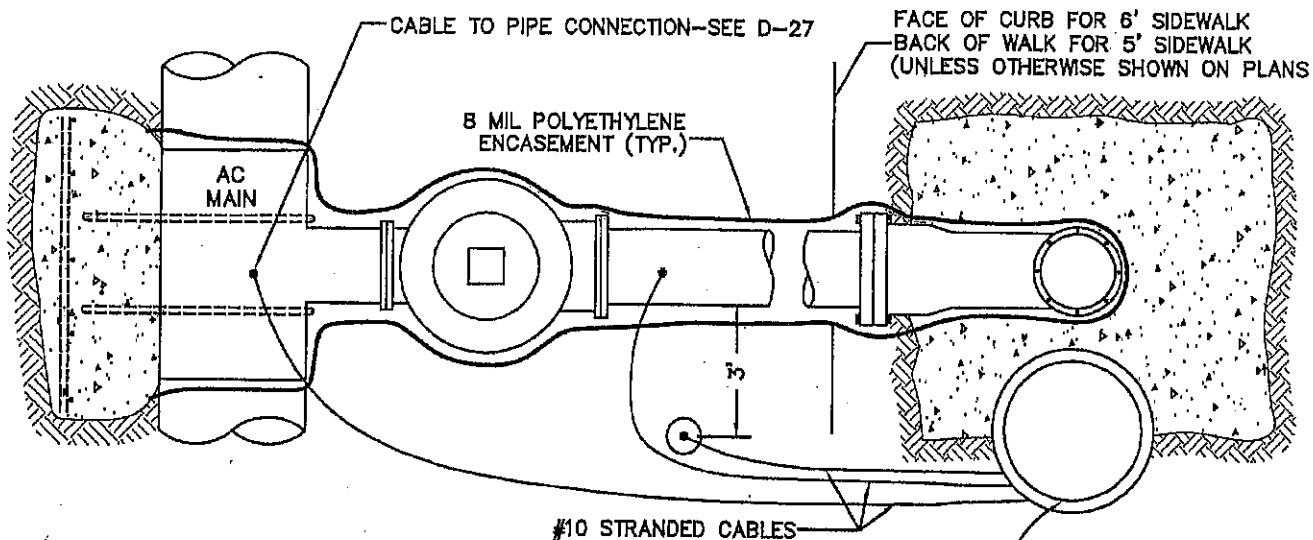
1. FOR METER INSTALLATION SEE STANDARD D-3
2. PROVIDE 2-WIRE TEST STATION FOR SERVICES WHICH ARE ATTACHED TO OLD A/C OR C.I. PIPE. PROVIDE CATHODIC PROTECTION IN ACCORDANCE WITH PLANS AND STANDARD D-18 FOR NEW DUCTILE IRON PIPE.
3. CONNECT TEST LEAD TO SERVICE PIPE IF WATER MAIN IS A.C.
4. ADD INSULATED FLANGES TO ISOLATE METER ONLY IF THE INSTALLATION DOES NOT REQUIRE CATHODIC PROTECTION.

**CITY OF MOUNTAIN VIEW
DEPARTMENT OF PUBLIC WORKS
STANDARD DETAIL**

**STANDARD 4" OR LARGER METER INSTALLATION
CORROSION CONTROL DETAILS**

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APPROVED BY: <i>[Signature]</i> No. 27089 Exp. 03-31-01 ASSISTANT PUBLIC WORKS DIRECTOR CITY OF MOUNTAIN VIEW, CALIFORNIA		
06-29-99 DATE	03-31-01 EXP.	27089 R.C.E. NO.

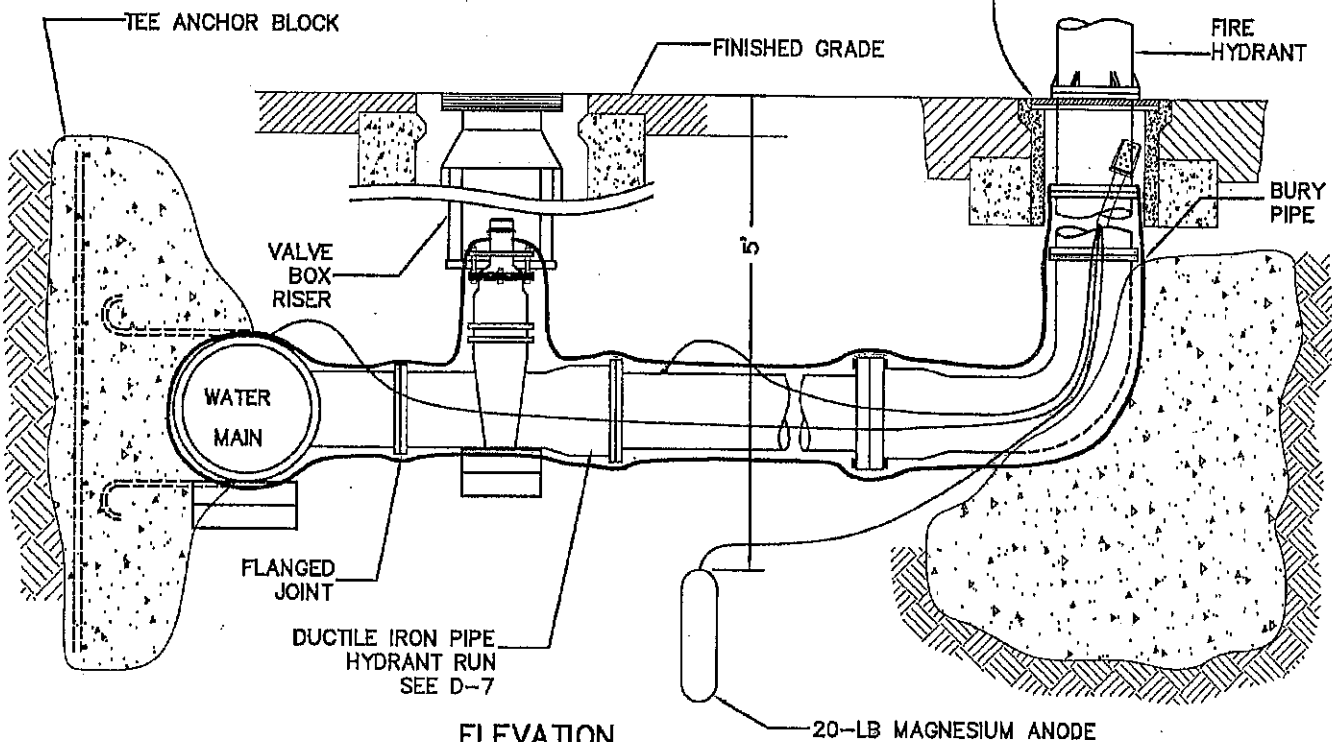
FILE NO. **D-31A**



PLAN

NOTE: BOND ALL JOINTS (EXCEPT FLANGES) — SEE D-28

ANODE JUNCTION AND
TERMINAL BOX
SEE D-23 AND D-24



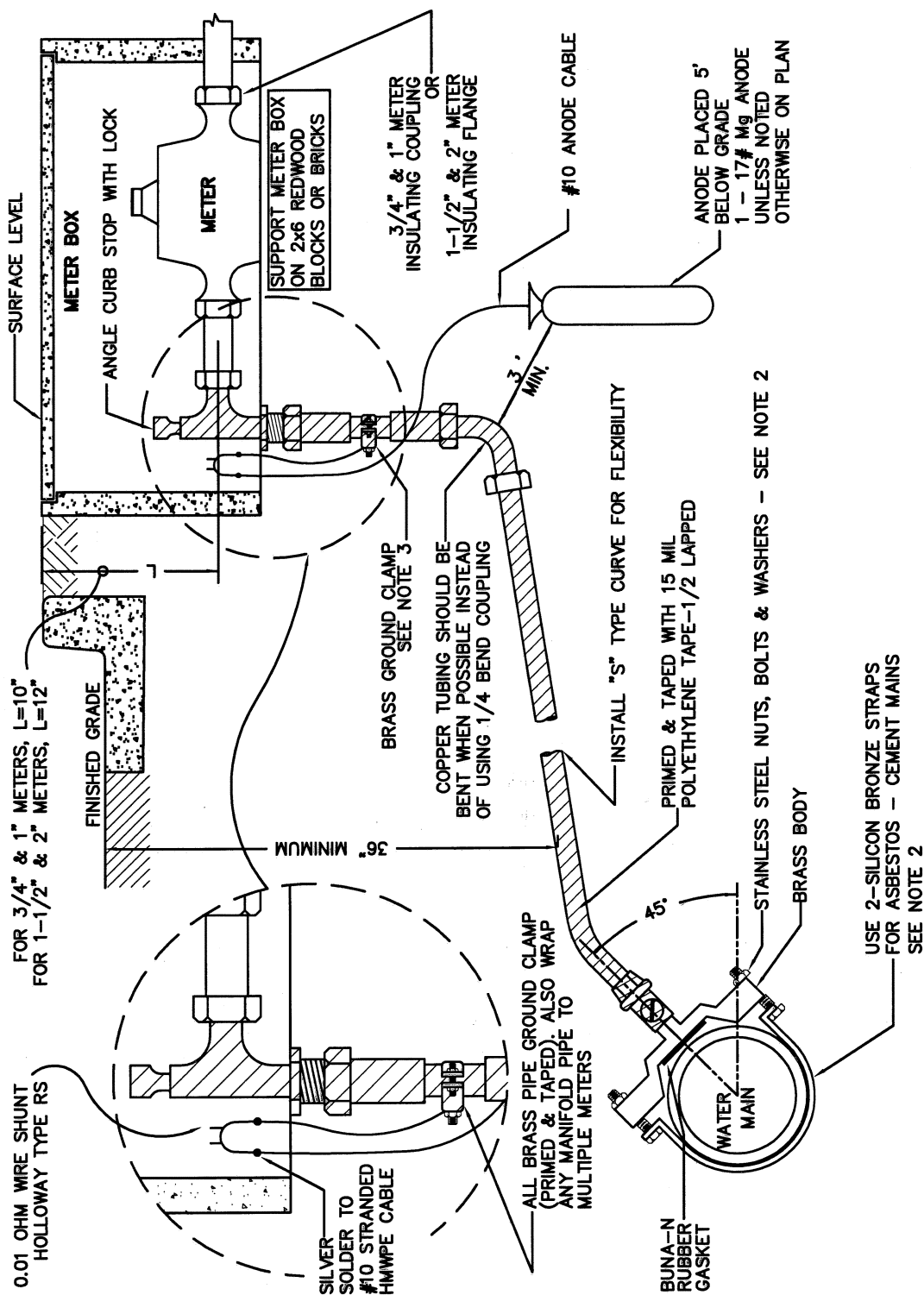
ELEVATION

CITY OF MOUNTAIN VIEW
DEPARTMENT OF PUBLIC WORKS
STANDARD DETAIL

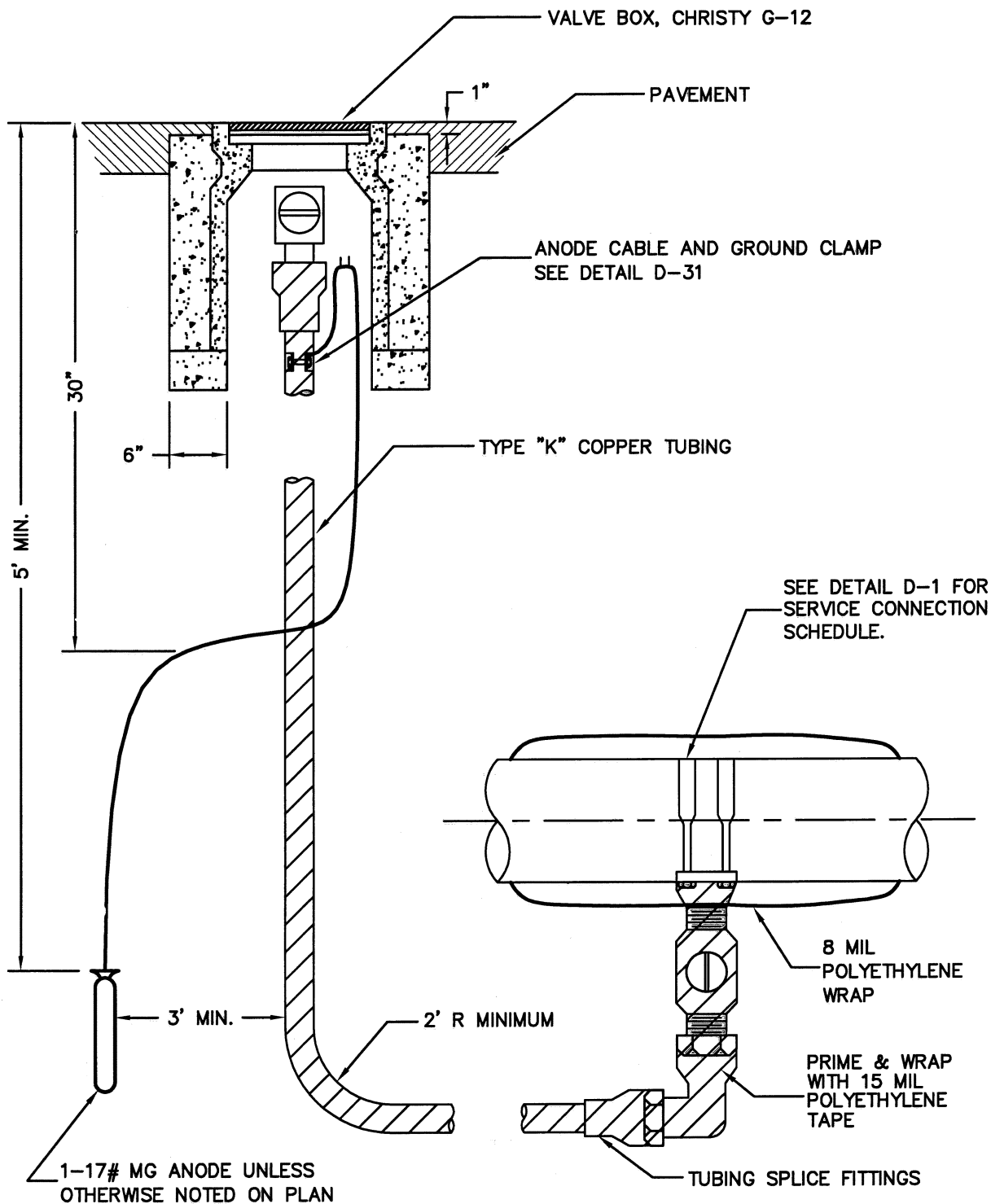
**STANDARD FIRE HYDRANT INSTALLATION
CORROSION CONTROL DETAILS —ACP MAINS**

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EXR. 03-31-07		
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FILE NO. **D-31B**



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CITY OF MOUNTAIN VIEW
DEPARTMENT OF PUBLIC WORKS
STANDARD DETAIL

**2" STANDARD BLOW-OFF VALVE
CATHODIC PROTECTION**

FILE NO. **D-33**

Revision

Date

Approved

Drawn : QT

Date : 02-25-05

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Scale : NTS

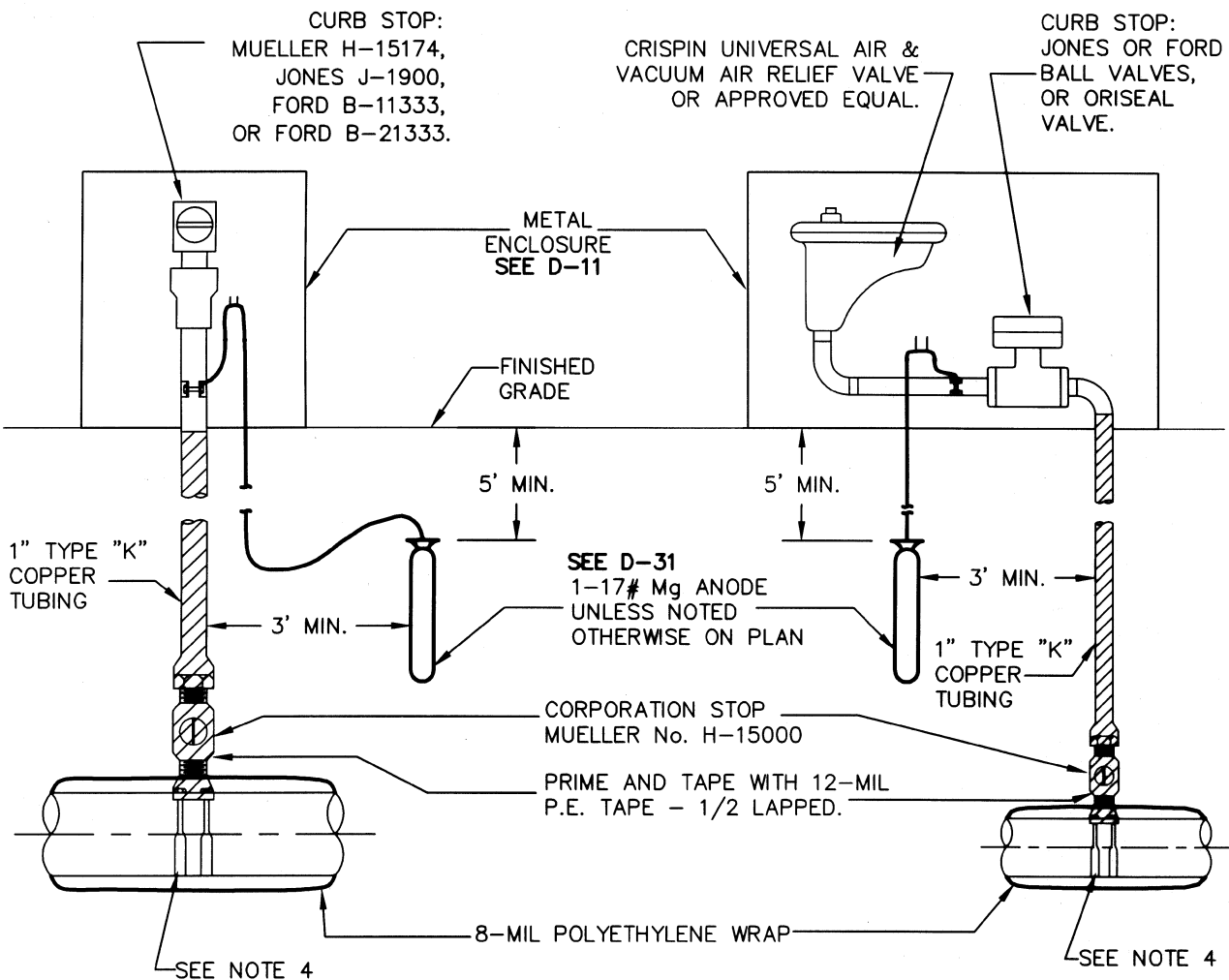
APPROVED BY:

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R.C.E. NO.



MANUAL AIR RELIEF VALVE

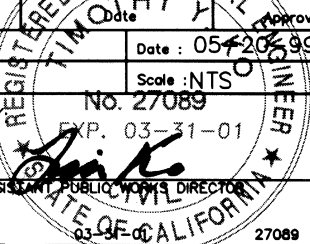
AUTOMATIC AIR & VACUUM VALVE

NOTES:

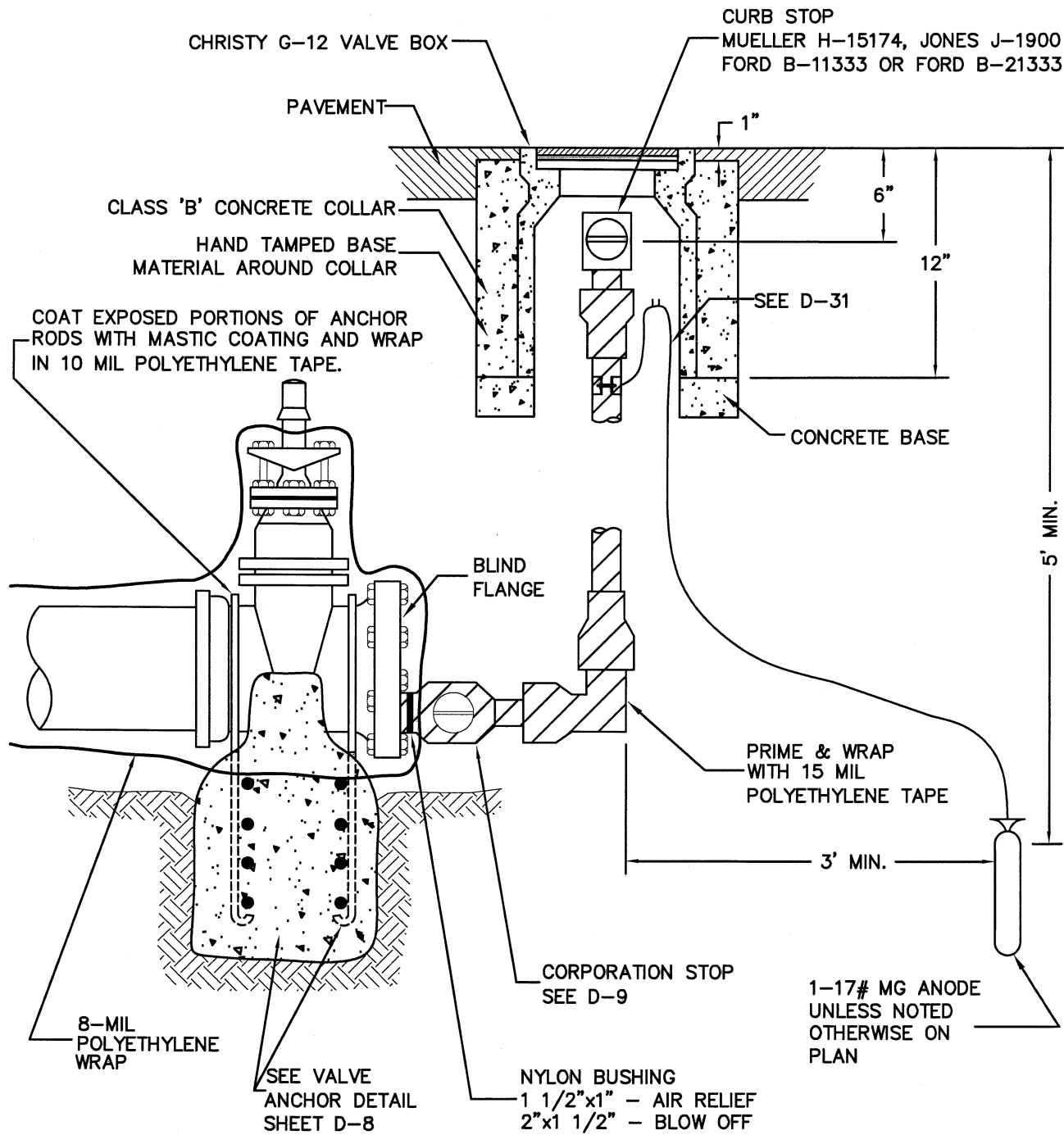
1. CONNECTION TO WATER MAIN SHALL CONFORM TO STANDARD DETAILS AND SPECIFICATIONS.
2. USE SAME DIAMETER SEAMLESS COPPER TUBING AS REQUIRED SIZE OF AIR & VACUUM RELIEF VALVE.
3. AIR RELIEF VALVE AND CURB STOP SHALL BE PLACED IN BOX SUCH THAT THE WALL OF THE BOX WILL NOT INTERFERE WITH THE INSTALLATION AND REMOVAL OF THE VALVES.
4. FOR A/C : DOUBLE STRAP SERVICE CLAMP.
FOR PVC : SERVICE SADDLE APPROVED BY ENGINEER.
FOR DIP, CIP : SEE DETAILS IN D-31

**CITY OF MOUNTAIN VIEW
DEPARTMENT OF PUBLIC WORKS
STANDARD DETAIL**

**STANDARD AIR RELIEF VALVE
CATHODIC PROTECTION**

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FILE NO. **D-34**



NOTE:

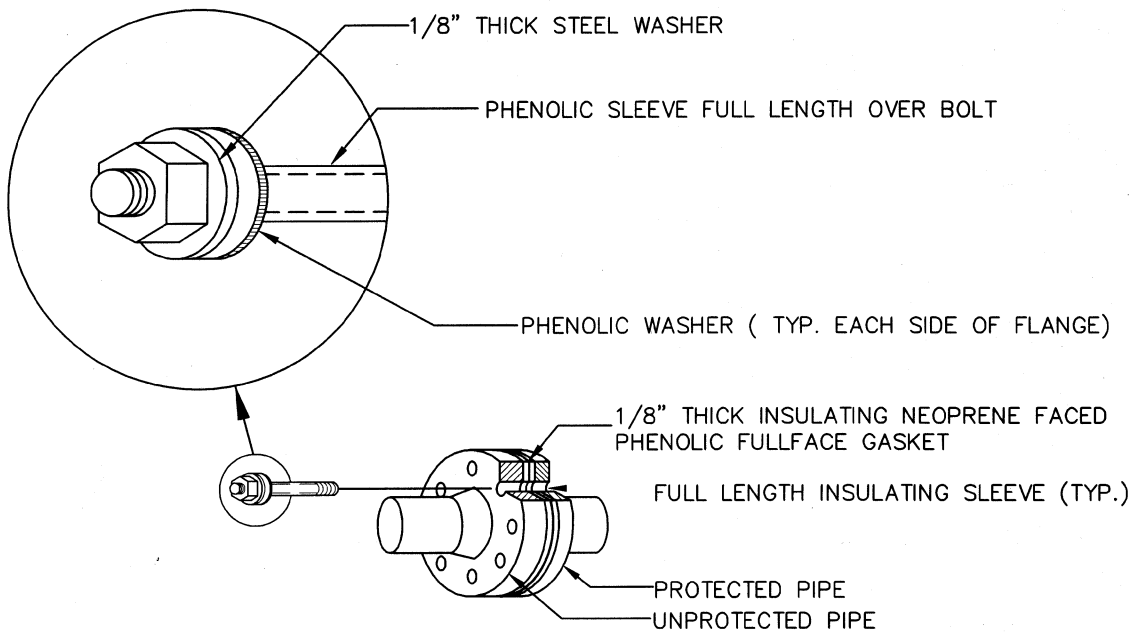
INSTALL AIR RELIEF OR BLOW-OFF ONLY AT LOCATIONS DESIGNATED ON THE PLANS.

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APPROVED BY: <i>Timothy K. Jones</i> ASSISTANT PUBLIC WORKS DIRECTOR		
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CITY OF MOUNTAIN VIEW
DEPARTMENT OF PUBLIC WORKS
STANDARD DETAIL

**STANDARD BLIND FLANGED GATE VALVE
AT END OF MAIN
CATHODIC PROTECTION**

FILE NO. **D-35**

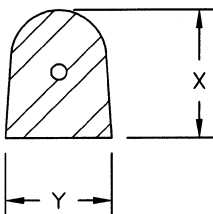
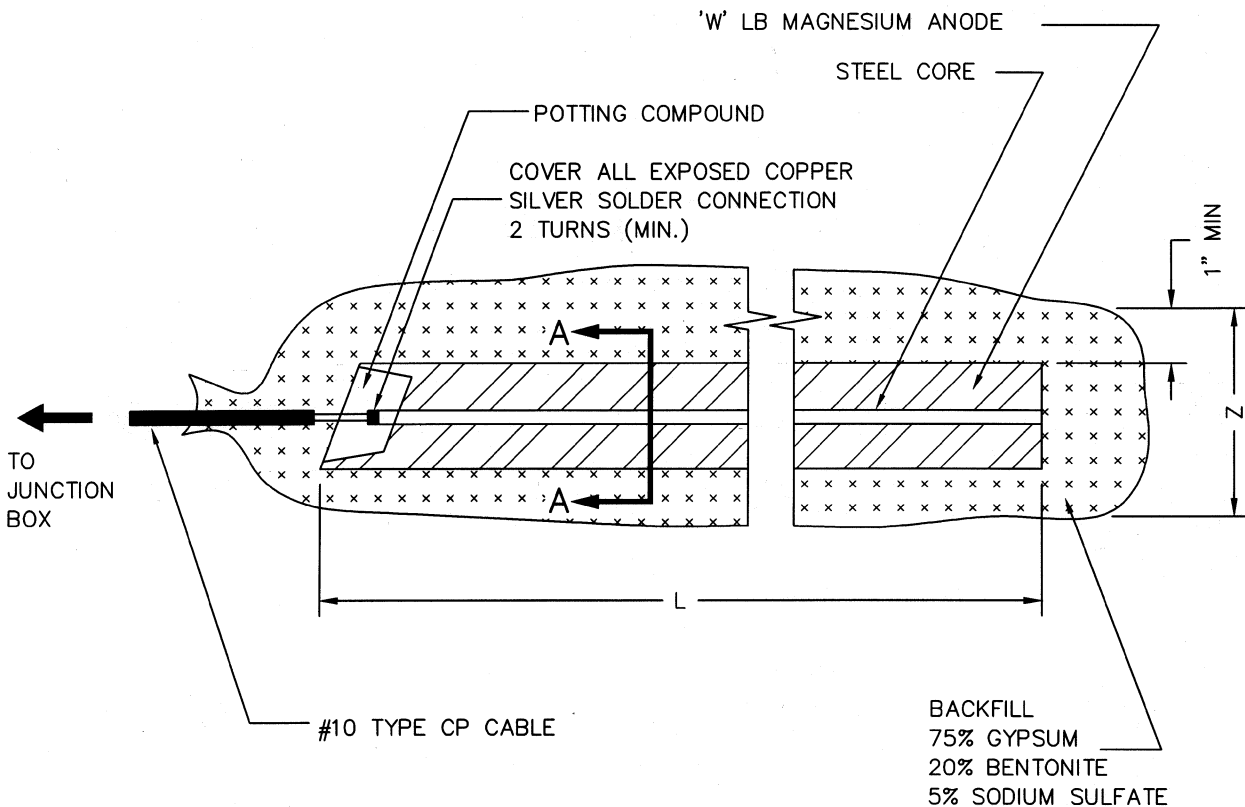


INSULATING FLANGE

**CITY OF MOUNTAIN VIEW
DEPARTMENT OF PUBLIC WORKS
STANDARD DETAIL**

STANDARD INSULATING FLANGE

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SECTION A-A

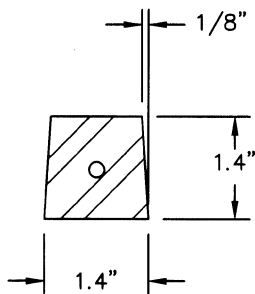
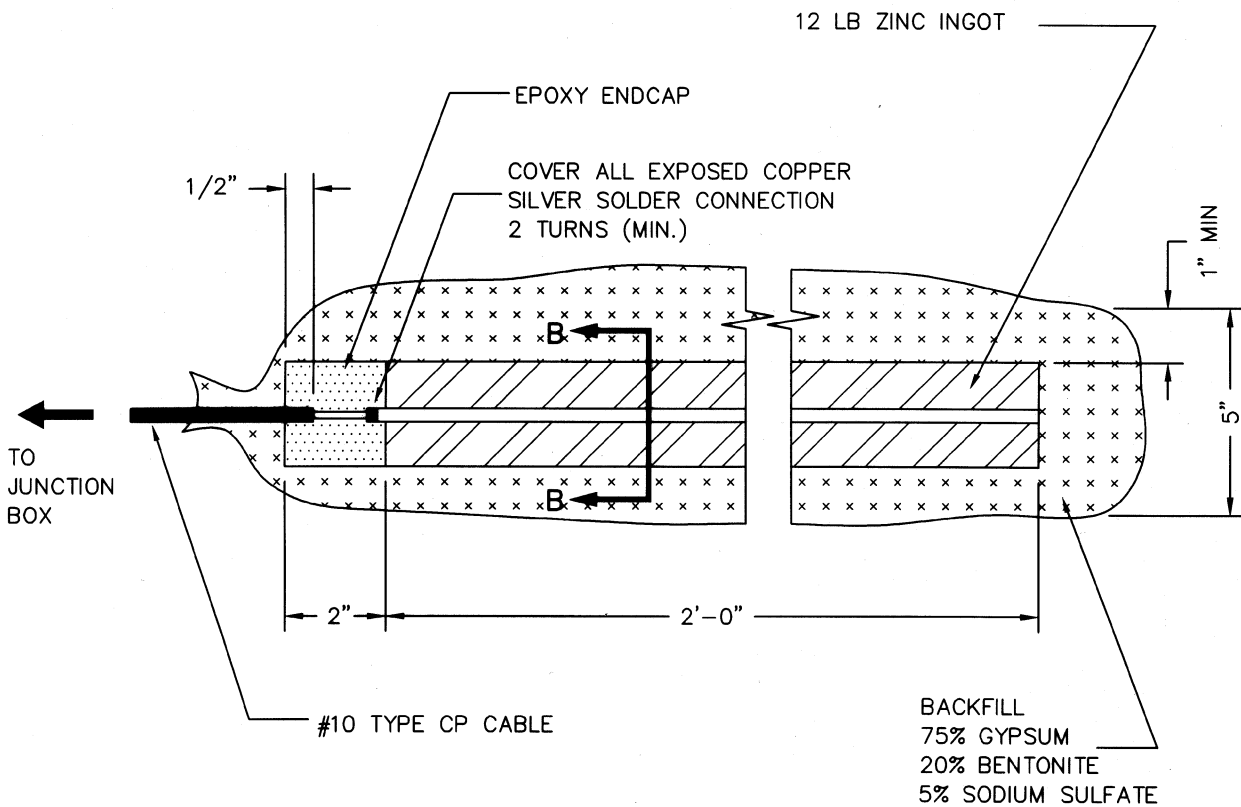
W (LB)	17	60	20
X (IN)	3	4 1/2	3
Y (IN)	2 3/4	4 3/4	2 3/4
Z (IN)	5	7	5
L (IN)	50	59 3/4	59 3/4

**CITY OF MOUNTAIN VIEW
DEPARTMENT OF PUBLIC WORKS
STANDARD DETAIL**

STANDARD MAGNESIUM ANODE

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FILE NO. **D-37**



SECTION B-B

**CITY OF MOUNTAIN VIEW
DEPARTMENT OF PUBLIC WORKS
STANDARD DETAIL**

STANDARD 12-LB ZINC ANODE

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FILE NO. **D-38**